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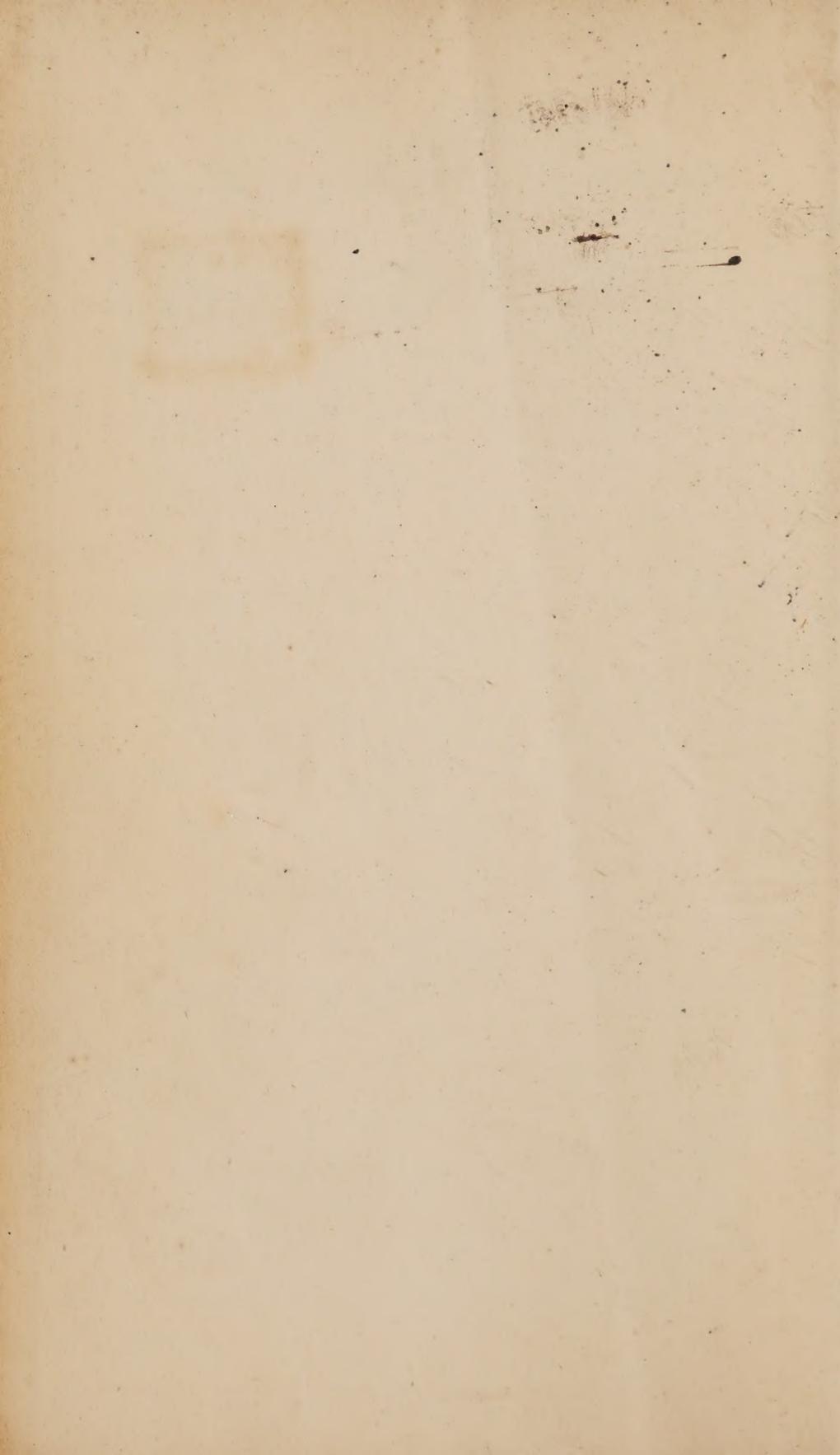
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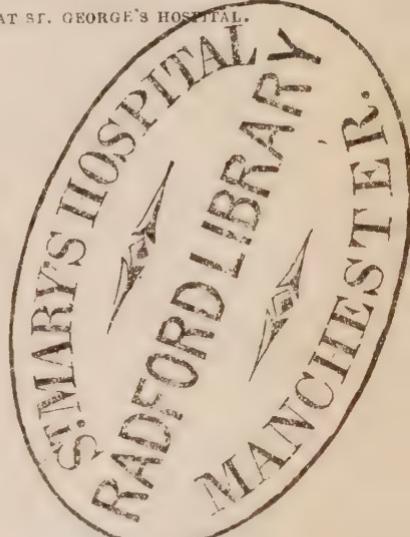
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# CLINICAL MIDWIFERY.

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OBSERVATIONS ON THE PRESENT STATE OF OPERATIVE MIDWIFERY, AND THE HISTORIES OF FIFTY-FIVE CASES OF DIFFICULT PARTURITION, IN WHICH THE FORCEPS WAS EMPLOYED.

If we compare the Reports of the principal Lying-in Hospitals of Great Britain, France, and Germany, and examine the doctrines inculcated by the best systematic writers of these countries, it is impossible to avoid being struck with the want of uniformity which prevails in all that relates to the operations of midwifery. Although the causes of difficult parturition must be nearly the same in every part of Europe, cases of instrumental delivery are far more numerous in some countries and institutions than in others, and the method of operating is widely different. In England there are few practitioners of judgment and experience, who have frequent recourse to the forceps, or who employ it before the orifice of the uterus is fully dilated, and the head of the child has descended so low into the pelvis, that an ear can be felt, and the relative position of the head

to the pelvis accurately ascertained. The instrument is not employed in this country where the pelvis is much distorted, or where the soft parts are in a rigid state, but it is had recourse to where delivery becomes necessary in consequence of exhaustion, haemorrhage, convulsions, and other accidents, which endanger the life of the mother. It is used solely with the view of supplying that power which the uterus does not possess.

The employment of the long forceps in cases of distorted pelvis has been recommended by Baudelocque, Boivin, Lachapelle, Capuron, Maygrier, Velpeau, and Flammant, whose works contain ample instructions for its use, before the head of the child has entered the brim of the pelvis; and the last of these writers has expressed his belief, that the instrument is more frequently required while the head of the child remains above the superior aperture of the pelvis, than after it has descended into the cavity. These authors also recommend the forceps in presentations of the nates, and to extract the head after the expulsion of the trunk and extremities of the child.

The operation of craniotomy is performed by all British practitioners of reputation, whether the child be alive or dead, if the condition of the mother is such as to render delivery absolutely necessary, and the head of the child is beyond the reach of the forceps, or where, from distortion of the pelvis, or rigidity of the os uteri and vagina, it cannot be extracted if its volume is not reduced. This operation is performed from a conviction that if neglected to be done at a sufficiently early period, the mother's life will be sacrificed, and the life of the mother is considered as much more important than that of the child.

Some continental authors affirm, that in England we have frequently recourse to craniotomy without due consideration, and without regard to the life of the child; and whatever the state of the parent may be, they refuse to open the head till they can obtain cer-

tain evidence that it is dead. "Nothing could excuse the conduct of the practitioner," observes Baudelocque, "who would perforate the head without previously knowing with certainty that it was not alive, a circumstance which can alone authorize us to employ the perforator and crotchet."

The same opinion is expressed by Velpeau, who maintains that even when the child is dead, if the diameter of the pelvis is only fifteen lines, or the whole hand cannot be passed into the cavity of the uterus to turn the child, the Cæsarean operation is to be performed. When the small diameter is from twelve to fifteen lines, he considers hysterotomy to be necessary, whether the child be alive or dead, and that it is also required if the child be alive, when the diameter measures from eighteen lines to two inches and a quarter. Craniotomy, he thinks, must be rarely necessary, for in more than twenty-thousand labours it was performed only twelve times by M. Lachapelle. According to Stein and Plenck, a conjugate diameter of three inches, two and three-quarters, two and a half, or two and a quarter, prevents either nature or the forceps from effecting the delivery. Therefore, if the child be living, the Cæsarean section must be performed, or if the child be dead, the perforator must be used. These authors also affirm, that a conjugate diameter of two inches renders delivery impossible. If the child should be alive, the Cæsarean section must be performed; if the child be dead, they say it is scarcely possible to open the head.

The Reports of two hundred and fifty-eight cases of Cæsarean section have been collected by Michaelis, one hundred and forty-four of which occurred in the last, and one hundred and ten in the present century. Of these cases, one hundred and forty proved fatal. Velpeau states, that the operation was performed twenty-eight times between 1810 and 1820, and sixty-one times from 1821 to 1830. Dr. Churchill says, the

operation was performed three hundred and sixteen times, between 1750 and 1841, and that the mortality was 52·8 per cent for the mothers. It is well known that many unfortunate cases of Cæsarean operation have occurred in France and Germany, of which no reports have been published, and those who have recently visited the continent have assured me, that this operation, notwithstanding its fatality, is becoming more and more common.

In Great Britain, the Reports of at least twenty-seven cases are to be found, and in twenty-five of them it was fatal to the mother. If correctly informed, there is no eminent accoucheur now practising in London, who has been present at the performance of the operation upon the living body, or who would recommend it, if delivery could be effected by the perforator and crotchet.

The discordance which exists between Continental and British practitioners and authors is not less strikingly displayed respecting the induction of premature labour. In numerous cases it has been successfully employed in this country, and it is now ascertained that the operation is attended with little risk to the mother, and that nearly one half of the children are born alive and continue to live where it is performed after the seventh month. In cases of great distortion of the pelvis, the induction of premature labour at an early period of pregnancy, before the sixth month, is likewise known to be a safe operation, and to render craniotomy and the Cæsarean section wholly unnecessary.

In Germany and Holland, it has frequently been employed by May, Weidman, Ch. Wenzel, and others with satisfactory results. Baudelocque regarded the induction of premature labour as a useless, if not an injurious operation, and Dugès has recently characterized it as fatal to the mother, and the source of most frightful abuse. In the tables of the Maternité

by Baudelocque, Boivin, and Lachapelle, including nearly sixty thousand cases of labour, there is no account of any case in which premature labour was induced. The last of these writers begins her strictures on the practice by declaring that she had never either employed "that method, or seen others have recourse to it."

The propriety of inducing premature labour was brought under the consideration of the Academy of Medicine, Paris, in 1827, and they decided that the practice was unjustifiable under any circumstances.

*A comparative view of the frequency of forceps and craniotomy cases in eleven Lying-in Hospitals.*

Hospitals.	Number of labours.	Forceps cases.	Proportion.	Cra-niotomy cases.	Proportion.
Dublin, Clarke.	10,199	14	1 in 728	49	1 in 248
Do., Collins.	16,654	27	1 in 617	118	1 in 141
Paris, Baudelocque.	17,388	31	1 in 561	6	1 in 2898
Do., Lachapelle.	22,243	76	1 in 293	12	1 in 1854
Do., Boivin.	20,517	96	1 in 214	16	1 in 1282
Vienna, Boer.	9,589	35	1 in 274	13	1 in 737
Heidelberg, Naegele.	1,711	55	1 in 31	1	1 in 1711
Berlin, Kluge.	1,111	68	1 in 16	6	1 in 185
Dresden, Carus.	2,549	184	1 in 14	9	1 in 283
Berlin, Siebold.	2,093	300	1 in 7	1	1 in 2093

From these conflicting statements, it is clear that the first principles of Operative Midwifery have not yet been established, and that there is no other branch of surgery, at the present time, in such a rude condition. It is unnecessary to do more than point out the pernicious effect which this must exercise upon those who have been compelled to commence the practice of midwifery, without having enjoyed the opportunity of witnessing difficult cases, or seeing any important operations performed. Had a faithful history

been given of all the fortunate and unfortunate cases of artificial delivery referred to in the preceding table, had the circumstances been accurately described, which led to the employment of the forceps and perforator, and the consequences which resulted from their use, it is impossible that so great a discordance of opinion should so long have existed respecting the method of treatment in cases of difficult labour.

In this REPORT, I propose to give a succinct account of all the cases, which have fallen under my observation, in which recourse has been had to the midwifery forceps, or it has been proposed to have recourse to it, with the view of illustrating the various circumstances which render it necessary to employ this instrument, of determining the positive good we derive from it, and the injurious consequences which result when it is rashly and injudiciously applied.

(CASE 1.) On the 28th June, 1823, I was present at the delivery of a woman, æt. thirty, who had been in labour nearly three days and nights, under the care of a midwife. It was the first child. The orifice of the uterus was not fully dilated, and it was very rigid. The vagina swollen and tender, the abdomen tense and painful on pressure. Tongue loaded; urgent thirst; countenance flushed; pulse rapid and feeble. The labour pains for ten or twelve hours, had been gradually becoming more feeble and irregular. The head of the child was strongly compressed and much swollen, and the greater part of it was above the brim of the pelvis. An ear could not be felt, and the hollow of the sacrum was empty. It was determined by the practitioner who had charge of the case to attempt to deliver with the long forceps, and he observed, before proceeding to introduce the blades, that it was a case in which the superiority of the long over the short forceps would be observed in a striking manner; and that in less than a quarter of an hour the delivery would be safely and

easily completed, and the life of the child preserved. The blades of the forceps were, however, introduced with great difficulty, and still greater was experienced in getting them to lock. Strong traction was then made for several minutes, and the blades slipped off the head. They were re-introduced, and the efforts to extract renewed, and continued till the instrument again slipped off. This happened several times, but the attempt to deliver with the long forceps was not abandoned till the operator was exhausted with fatigue. The head was then perforated, and extracted with the crotchet. Violent inflammation and sloughing of the vagina followed, and about three weeks after delivery, it was ascertained that a large vesico-vaginal fistula existed. She was abandoned by her husband, and was afterwards reduced, in consequence of this misfortune, to the greatest possible misery. This was the first time I ever saw the forceps applied in actual practice, and I was struck with the vast difference which exists between the application of the forceps to the head of an artificial foetus put into a phantom, and the head of a living child. I was led to suspect, from what I now witnessed, that a dangerous degree of boldness and hardihood might readily be acquired by long practice upon a phantom, where this was not combined with attendance on cases of difficult labour. The unfortunate termination of this case made me resolve carefully to watch the progress and termination of all the cases of difficult labour which I could meet with, and preserve accurate histories of them, which has been done to the present time.

(CASE 2.) On Saturday morning, July 12th, 1823, I saw a woman æt. twenty-six, also a patient of a public institution, who had been nearly fifty hours in labour with her first child. The membranes had been ruptured on the Thursday evening, and the pains had been gradually becoming more and more feeble, during the afternoon and night of Friday. On Saturday morning

the pains had nearly ceased. The pulse quick, skin hot, the pupils were unusually dilated, and there were slight convulsive tremors of the muscles of the face and extremities. The orifice of the uterus was fully dilated. The external parts were rigid, hot, and swollen. The head of the child was firmly pressed into the brim of the pelvis, but the greater part of it had not passed through it. The bones overlapped much, and a large tumour of the scalp was formed. A copious venesection was employed, and soon after two severe fits of convulsion took place. The blades of the long forceps were applied, but they slipped off the head as in the former case when an attempt was made to extract, and the delivery was completed by craniotomy. In a few hours consciousness returned, and no more fits were experienced, but on the third day violent inflammation of the uterus took place.

(CASE 3.) On the 29th August, 1824, two p. m. I was called to a patient residing at 7, Harford-place, Drury-lane, who had been in labour more than twenty-four hours. The os uteri was rigid, and little more than half dilated; the membranes were ruptured; the head had not passed into the cavity of the pelvis. Pulse strong and frequent; tongue loaded; much thirst; abdomen tender. The pains were regular, but had little effect upon the head. Twelve ounces of blood were drawn from the arm, and an opiate clyster administered. At nine p. m. the os uteri fully dilated, and the head so low in the pelvis than an ear could be felt. As symptoms of exhaustion were beginning to appear, and I thought it probable the head would not be expelled without assistance, I applied the short forceps with great care, and completed the delivery in half an hour. The child was alive, and the mother recovered very well.

(CASE 4.) On the 16th of December, 1828, I was called to a woman residing in Currier Street, St. Giles's, who had been in strong labour upward of forty-eight hours. The

head was jammed in the brim of the pelvis, and the pains had nearly gone off. Pulse 120. Great restlessness and delirium. The vagina hot, swollen, and tender. Discharges very offensive. Abdomen tense and painful. Retention of urine. To satisfy my own mind, I endeavoured to apply the forceps, but the attempt to pass the blades produced so much pain, that I was forced to desist, and open the head. An hour and a half elapsed before I could extract the head with the crotchet, and not till the bones of the head and my fingers were much torn. Hæmorrhage followed the removal of the placenta, but it was arrested by pressure over the fundus uteri, and the application of cold to the external parts. She recovered. Mr. Curtis of Dorking was present.

(CASE 5.) On the 4th of Feb. 1829, Mr. Watkins requested me to see a patient who had been in labour two days and two nights. It was her second labour. The os uteri was only half dilated, and the head swollen and firmly compressed by the brim of the pelvis, was so high up, that an ear could not be reached with the finger. The vagina was dry and swollen. The pains continued, but had no effect upon the head. Mr. W. had attempted to apply the forceps before my arrival, but he could not get the blades over the head. After perforation, great difficulty was experienced in extracting the head with the crotchet, and we did not succeed till the point of the instrument was passed up and fixed on the outside, near the angle of the jaw. A great part of the bones of the cranium had been torn before this was done. Slight uterine inflammation followed. This woman had once before been delivered by craniotomy.

(CASE 6.) In the summer of 1831, I saw a patient in the Middlesex Hospital with Dr. H. Ley, in whom extensive sloughing of the vagina had followed the use of the forceps. The instrument had been applied by a practitioner of experience and reputation. The child was dead.

(CASE 7.) In the same year, Mr. Prout, surgeon to the

British Lying-in-Hospital, requested me to accompany him to a case of difficult labour in Ogle Street, from a thick cicatrix of the vagina. This patient had likewise been delivered some years before with the forceps, and the accoucheur was an eminent operator and writer on midwifery instruments. I am uncertain if the first child was alive.

(CASE 8.) April, 1832, I was called to a patient of the St. Marylebone Infirmary, who had been in labour nearly sixty hours, and was attended by one of the parochial midwives. The os uteri was thick, rigid, and imperfectly dilated, the head was squeezed firmly into the brim of the pelvis, and an ear could not be felt. Ergot had been given by the midwife at different times during the progress of the labour, and it was said to have increased the strength of the pains. Mr. Hutchinson, then house-surgeon to the Infirmary, agreed with me in thinking that the forceps could do nothing but mischief, and that it was necessary to deliver without delay by opening and extracting the head. This I immediately did, and from the long-continued efforts required to drag the head into the cavity of the pelvis, it was evident that the delivery could have been accomplished in no other way with safety to the mother. She recovered rapidly. On the 11th of April, 1833, I was again called to deliver this patient, but suffering from indisposition at the time, Mr. Hutchinson attended her for me. He found the scalp tumid, the bones riding, external parts swollen. Pains strong for thirty hours. He opened the head, and found little difficulty in extracting it. In the autumn of 1834, I was called to deliver this patient in her third labour. She was on this occasion attended by two young and inexperienced accoucheurs, and she had neglected to inform them of what had occurred in her two previous labours. Before I saw her the ergot of rye had been liberally administered, and repeated attempts made to deliver her with the forceps, the blades of which had lacerated the

vagina extensively on the left side. The vagina and external parts enormously swollen and inflamed. The head so fast wedged in the brim of the pelvis, that it was difficult to pass the finger around it. The abdomen was tense and painful on pressure, and the bladder filled with urine. The pulse extremely rapid and feeble. There was incessant vomiting and complete exhaustion. I immediately opened the head, and extracted it with the crotchet, but she died in a few hours.

(CASE 9.) After the occurrence of this case I endeavoured to point out as clearly as possible, to the practitioner who had thus so incautiously applied the forceps, the danger of using the instrument for the purpose of drawing the head of the child into the cavity of the pelvis where the brim is distorted. The impression made upon his mind was, however, very transitory, for not many years after, he again attempted to deliver with the forceps in a case where the head was impacted in the brim, and the vagina enormously swollen. When I saw the patient, one blade of the forceps was so firmly fixed between the head and front of the pelvis, that I had great difficulty in withdrawing it. After perforation, strong efforts were required to complete the delivery, and she died within forty-eight hours.

(CASE 10.) On the 20th of October, 1832, I saw a patient in the lying-in ward of the St. Marylebone Infirmary, who had been in labour with her first child upwards of thirty hours. The occiput was to the right ischium, and the left ear was near the symphysis pubis. The head had made little progress for twenty hours. After dilating the external parts, the blades of the short forceps, covered with leather, were easily applied and locked, and the head extracted without much force. The child was alive, and had sustained no injury.

(CASE 11.) In the summer of 1833, a practitioner of little experience was engaged to attend a woman in labour, who resided in one of the courts between Princes Street and Great Windmill Street. She had previously

been delivered of several children without difficulty. On this occasion the labour was protracted, and without any consultation recourse was had to the forceps, and she was delivered of a dead child. Soon after, the usual symptoms of ruptured uterus supervened, and she did not long survive. In the evening I saw the body, but was not permitted to make any examination of the uterus. It was with difficulty that a coroner's inquest was prevented from being held. After this occurrence, the practitioner soon left England.

(CASE 12.) About the same time, a medical practitioner, who had been extensively employed as an accoucheur at the west end of London, met with a case of very protracted labour, in which it became evident that the child would not be expelled without artificial assistance. He called into consultation an obstetrical physician of the greatest celebrity, who has been accustomed in his lectures to recommend the use of the long forceps. At six in the morning, when he was called, the head of the child had not passed through the brim of the pelvis, and was completely beyond the reach of the short forceps. At the end of four or five hours, during which time the head had not descended further into the cavity of the pelvis, it was determined to deliver with the long forceps. The blades of the instrument were passed up, and the head grasped and extracted, after the employment of much force ; but scarcely had the delivery been accomplished, though there was no haemorrhage, than the patient became restless, sick, and faint, and threw her arms incessantly around her. She died within three hours, with symptoms of ruptured uterus. The child was alive, and has been reared.

(CASE 13.) In June, 1833, Mr. Evans of Mortimer Street, requested me to see a patient who had been nearly thirty hours in labour with her first child. Though the pains were strong, and the head was at the outlet of the pelvis, it had made no progress for ten hours. Twelve ounces of blood were drawn from the arm, and a stimu-

lating enema thrown up. After waiting several hours without any change taking place in the situation of the head, and exhaustion occurring, I applied the forceps with great ease, and delivered in less than half an hour. I took off the blades when the head was passing, to prevent laceration of the perineum. The child breathed, but died in a few minutes. The umbilical cord was twisted three times round the neck: and this might have been the cause of the difficulty experienced in the labour, and the death of the child. Ever since the occurrence of this case, I have endeavoured, and sometimes successfully, to ascertain, before applying the forceps, whether the cord surrounded the neck and pulsated.

(CASE 14.) On the 27th of August, 1833, a patient of the St. Marylebone Infirmary had been forty hours in labour with her fourth child. The head was at the outlet of the pelvis, and as the pains were still strong and regular, there was a great probability that it would in time have been expelled without artificial assistance. I thought, however, that it would sustain less injury if extracted with the forceps, than if left to suffer further from the pressure, as it was much swollen. The instrument was easily applied, and the head extracted with little force. The child was alive, and did well, and the mother was not hurt.

(CASE 15.) About the same time, I was called to a case of protracted labour from rigidity of the parts at the outlet of the pelvis. The patient was advanced in life, and it was her first child. The os uteri was fully dilated, and the head advanced so far into the pelvis, that an ear could be felt. The head was much swollen, and all the soft parts. The pains were feeble. I had no difficulty in passing the blades of the forceps over the sides of the head, but could not, without much, and indeed by any degree of force, get them to lock. The gentleman who consulted me made several strong attempts to lock the blades, but he could not succeed, and he determined, contrary to my advice, to endea-

vour to extract the head with the blades unlocked, which he succeeded in doing to my surprise, and thereby saving the life of the child. The perineum was, however, extensively torn, and I have not since felt justified in operating with the blades of the forceps unlocked.

(CASE 16.) A lady, æt. thirty ; first pregnancy ; labour commenced at three o'clock, A. M., Sunday, 10th of November, 1833. At eight P. M. the os uteri was considerably dilated, but the pains were irregular and ineffectual. Thirty drops of laudanum were administered by the medical attendant, and the same quantity given two hours after. At four A. M. of Monday, the membranes were artificially ruptured, and a drachm of ergot given in four doses, at intervals of twenty minutes. It produced nausea, but had no effect upon the uterine contractions. In the afternoon of Monday, when I first saw the patient, the head had advanced so little through the brim, that the ear was touched with difficulty, behind the symphysis pubis. The os uteri was imperfectly dilated and rigid. The vagina and perineum also rigid. The pains strong and regular. Pulse 80. Head clear ; urine passed with difficulty. Twelve ounces of blood were taken, an enema administered, and warm fomentations applied to the external parts. At four o'clock on Tuesday morning, the head was in the same situation, the os uteri still imperfectly dilated, and the vagina swollen and tender, and the neck of the bladder compressed. The pains had almost entirely gone off. The abdomen was tense and painful. Tongue loaded. Urgent thirst. The tone of the voice was completely altered. Her strength was so greatly reduced, that it was clear she would never expel the child without help. It was my conviction that we had left her too long in labour, from the desire to save the child. I made an unsuccessful attempt to deliver with the forceps ; the second blade could not be passed and the instrument locked without occasioning great

pain, and the perforator was employed. The force afterwards required to extract the head with the crotchet, made us regret that we had not interfered sooner. No bad consequences followed.

(CASE 17.) Jan. 3rd, 1834, at eleven o'clock at night, I was requested to see Mrs. G., æt. forty, who had been upwards of thirty-six hours in her first labour. The membranes had been ruptured twenty-four hours. In the morning a dose of laudanum had been given, and about mid-day three doses of the ergot of rye. The pains had nearly gone off. The head was so low that an ear could be touched behind the symphysis pubis ; and the anterior lip of the os uteri, puffy and tender, was pressed down between them, during each pain. The vagina was hot, tender, and excessively rigid, as was the perineum. The labia were swollen to twice the natural size. Fourteen ounces of blood were drawn from the arm, a stimulating clyster thrown up, the bladder relieved by the catheter, and warm fomentations applied to the external parts. When the pains came on, the anterior lip of the os uteri was pressed up with two fingers. The pains returned with greater force and regularity, and for a time I hoped that the head would be expelled : but at four o'clock on the following morning, the contractions of the uterus entirely ceased, and she fell suddenly into a state of the most alarming exhaustion. The head was sufficiently low for the application of the forceps ; but the soft parts were so swollen and tender, that it was impossible to introduce the blades, and the head was opened. Although I extracted the head very slowly, so rigid was the perineum, that it gave way in a slight degree in spite of the most careful support. Inflammation and sloughing of the vagina followed, but she ultimately recovered without any injury to the bladder or rectum : and I have since delivered her of a living child at the full period with the forceps. The cicatrix in the vagina was extensively lacerated during the ex-

traction of the head without any serious mischief resulting from it. Blood-letting and all other means were had recourse to in the second labour, and the forceps was not applied till she was completely exhausted. The cicatrix of the vagina was too thick and extensive to admit of any relief from its division with the scalpel. The child could not possibly have been preserved in this instance without the forceps.

(CASE 18.) On the 26th of January, 1834, a lady, æt. twenty-six, had been thirty hours in labour with her first child. The head had remained in the pelvis ten hours without making any progress, and she felt much exhausted. The parts were not very rigid, and no difficulty was experienced in applying the forceps, and extracting the head, but in doing this the perineum was slightly torn. The cord was twisted firmly round the neck, and it did not pulsate. The child never breathed. Severe inflammation of the vagina took place, but no sloughing. In a few months the health was restored, and she has since had three living children without difficulty. The ergot of rye had been given before I saw this patient, and it increased the pains, without advancing the head.

(CASE 19.) On the 19th of August, 1834, I attended a lady, æt. thirty-six, who had a very protracted labour from rigidity of the os uteri and feeble irregular uterine action. Dr. H. Davies saw her when the pains had nearly ceased, and great exhaustion had taken place. Blood-letting, cathartics, and anodynes had produced little effect upon the os uteri in the earlier part of the labour. Dr. Davies applied the forceps, and soon extracted the head, but the child never breathed in a regular manner, and soon died in convulsions. Dangerous haemorrhage followed the birth of the child, and after the placenta was extracted, a severe rigor took place, and for many minutes the pulse could scarcely be felt. She, however, ultimately recovered, but her life was exposed to the greatest danger by delaying so long to

deliver, in the expectation that the head of the child would come sufficiently low for the forceps.

(CASE 20.) On the 12th March, 1835, I was present at the delivery of a patient in a public institution, where the forceps was applied, and the bones of the foetal head were severely injured. She was æt. twenty-seven. It was her first child, and she had been forty hours in labour. The pains had not ceased altogether, but the head had ceased to advance for many hours, and it had not cleared the brim, though the ear behind the symphysis pubis could be felt. A practitioner of the greatest experience and dexterity in using the forceps applied it, but the head could not be extracted without employing great force for a considerable period. The child breathed for a few seconds and then died. On the following day I examined the head, and found the bones much injured, the posterior part of the right parietal being completely detached from the occipital bone. The patient recovered slowly.

(CASE 21.) April, 1835, I delivered a patient in the lying-in ward of the St. Marylebone Infirmary with the forceps. The funis was round the neck once, and it pulsated very feebly. The pulsations of the heart continued for some time, but the child could not be made to breathe. Inflammation of the uterus followed. Had this case been left to nature, which I now think it might safely have been for some hours longer, it is not improbable but the child might have been expelled alive, without any artificial assistance.

(CASE 22.) Mrs. P. æt. twenty-six. April, 1835. First pregnancy : full period. Returned home after midnight from a large dinner party, at which she had partaken of a variety of dishes and wines, and had been seated near a large fire. Labour came on at four A.M., and soon after she became incoherent, and said she felt her teeth falling out of her head. On attempting to drink some warm tea, she bit a large piece from the edge of the china cup, and crushed it between her teeth. Violent convulsions

immediately followed. Copious venesection and an enema gave no relief. In an hour and a half the head of the child was within reach of the forceps, and it was applied, and the child was soon extracted alive. By feeling with the finger the umbilical cord round the neck pulsating, it was known to be alive when the forceps was applied. Although every precaution was taken to prevent injury being inflicted on the mother during the time the head was being extracted, the perineum was extensively lacerated, from the impossibility of retaining her for an instant in the same position. She died at eleven A.M. The child has been reared. Dr. Golding saw this case.

(CASE 23.) On the 18th July, 1835, I was called to a case of protracted labour by Mr. Harding, in which the head of the child had been in the cavity of the pelvis for six or eight hours without advancing. The os uteri was fully dilated. The pains were strong and regular. The left ear was behind the symphysis pubis. The blades were easily passed and locked, and with very little force the head was extracted, without any mark or injury. It was alive. Great hemorrhage followed, but she recovered, and probably would have done quite as well without the forceps.

(CASE 24.) On the 24th Oct. 1835, a case of dangerous uterine hemorrhage, from the placenta being detached from the fundus uteri, occurred in the St. Andrew's Parochial Infirmary. The membranes were ruptured, but the flooding continued, and the head being in the pelvis, I applied the forceps and easily extracted the child, but it was dead. The funis was round the neck.

(CASE 25.) At ten A.M., 6th Dec. 1835, I was called to Mrs. —, æt. thirty-six, at 7, Farm-street, Berkeley-square, who had been upwards of thirty hours in labour with her second child. The funis, without pulsation, was hanging out of the external parts, the meconium escaping, and the discharge from the vagina very foetid. The head and right arm were jammed in the brim of

the pelvis, the orifice of the uterus fully dilated, and an extensive cicatrix with a thin edge high up in the posterior wall of the vagina. I opened and extracted the head slowly with the craniotomy forceps, so that no part of the vagina was torn. The gentleman who had charge of the case informed me that he had delivered this patient of her first child with the forceps, two years before, after she had remained in labour three days and nights. The child was dead, and her recovery was so favourable, that there was no suspicion of the vagina having been injured.

(CASE 26.) On the 1st March, 1836, a middle-aged woman, addicted to the use of stimulants, was attacked with convulsions in the first stage of labour. Twenty-five ounces of blood being taken from the arm without any relief, I applied the forceps and delivered her of a dead child. The fits continued afterwards till she died. The head was examined after death, and the vessels of the brain were reported to have been unusually distended with blood. Both this and Case 22 would probably have ended fatally, whatever plan of treatment had been adopted.

(CASE 27.) Aug. 1836, I saw a case of puerperal convulsions in the lying-in ward of the St. Marylebone Infirmary. The patient had been long in labour, and had experienced fourteen severe fits. The head being sufficiently low and the parts dilated, I applied the forceps, and delivered with great ease, but the child was dead. She had only one slight fit after delivery, and no bad effect followed the use of the forceps.

(CASE 28.) On the 16th Aug. 1836, Mrs. —, æt. twenty-five, being in the eighth month of her fourth pregnancy, dined on currie and rice, and ate bacon and eggs at tea. At one o'clock on the morning of the 17th, she awoke with violent pain in the back part of the head, and sickness, for which she took a strong cathartic. Dr. Webster was called to her soon after, and ordered five grains of calomel and an antispasmodic draught, which relieved the symptoms. During the forenoon she remained in a

drowsy state, without complaining. At midday a fit of convulsion occurred. At three P. M. another and more violent fit followed. I saw her soon after this. The pulse was extremely rapid and feeble, and it became altogether imperceptible at the wrist on the abstraction of eight ounces of blood from the arm. More blood would not flow from a large orifice in the vein. The orifice of the uterus was slightly open, and the labour pains were commencing. I ruptured the membranes and discharged the liquor amnii. An hour after, four ounces of blood were drawn from the temple by cupping, when the pulse again became imperceptible. At six P.M. the os uteri being fully dilated, and the head in the pelvis, I delivered with the forceps. The child was dead. The fits continued, and she died at eight P.M.

(CASE 29.) On the 21st Sept. 1836, at three P. M., I saw a patient, æt. twenty-five, in the St. Marylebone Infirmary, who had been in labour forty-six hours. Since midnight the head had remained stationary. The os uteri was fully dilated. The greater part of the head had passed through the brim of the pelvis. An ear was felt. I applied the forceps, but the head would not move, though I used much force and for a considerable time. After perforation, the head was extracted with difficulty by the craniotomy forceps. No bad effect followed. Mr. Bishopp was present.

(CASE 30.) In the evening of the 24th Aug. 1837, I was requested to see a lady who had been in labour with her first child since one o'clock in the morning, during the whole of which time the pains had been feeble and irregular. At four P.M. a dose of laudanum had been given. At nine the pains were weak, and she appeared much exhausted. The orifice of the uterus was not fully dilated, and the greater part of the head was still above the brim of the pelvis. Near the umbilicus, a part of the uterus projected so much from some limb of the child pressing against it, that we dreaded rupture of the uterus if the labour were allowed to continue. The

forceps was applied by the gentleman in attendance, and strong efforts made to extract the head, but it would not advance, and recourse was had to the perforator. The perineum was torn while the shoulders were passing. She recovered, and has since had a living child, without artificial assistance.

(CASE 31.) On the 15th Aug. 1837, Mr. Jones, Soho-square, requested me to see a case of face presentation in the St. Anne's Parochial Infirmary. The head had not passed completely into the cavity of the pelvis. The face was greatly swollen, and also the vagina. The head had long been stationary : and as the pains were becoming more and more feeble, it was certain the delivery would never be completed without artificial assistance. I applied the blades of the forceps with great difficulty over the sides of the head, but found it impossible to lock them. The head was perforated, and the force afterwards required to extract it with the craniotomy forceps was so great, that I regretted having endeavoured to deliver before lessening the volume of the head. The patient, however, was not injured by the forceps.

(CASE 32.) Tuesday morning, the 2nd Jan. 1838, I was called by Mr. Wise to a case of protracted labour in Portland-street. The patient was a young woman who had been in labour with her first child since the Friday evening. The os uteri was fully dilated, and the head so low in the pelvis, that the ear could be felt behind the pubes. The pains had been gradually diminishing in force, and had no effect upon the head. The bladder was filled with urine. After passing the catheter, I applied the forceps readily and locked the blades, but the head could not be moved, although I continued for about half an hour to employ even more force than I considered justifiable in attempting to extract the head. After perforation, so much force was required to draw the head through the pelvis with the craniotomy forceps, that I regretted having attempted to save the child, and

still more when I was afterwards informed by Mr. W. that he had felt the funis around the neck and without pulsation, before the forceps had been applied.

(CASE 33.) Mr. Jorden, of Lower Belgrave-street, Surgeon Accoucheur to the St. George's Lying-in Institution, on the 10th of April, 1838, at eleven P.M., requested me to see a private patient, who had been unusually long in labour, in consequence of the face of the child presenting. The head had not advanced for eight or ten hours. The face was much swollen. There was not the slightest probability that the labour would ever be completed without artificial assistance. The forceps was applied, and the child soon extracted alive and uninjured. The mother recovered favourably. It is impossible for a case to occur, in which the employment of the forceps can be attended with more satisfactory results. Without the forceps the life of the child must have been destroyed, and the labour could not have been completed.

(CASE 34.) Mr. Cathrow, of Weymouth-street, requested me to see a patient in labour, on the 20th of April, 1838. She was thirty-five years of age. It was the first child, and the labour had continued so long that she was quite exhausted. The head was sufficiently low for the forceps, and the blades were easily applied, but by no force that we dared exert, would the head move forward, and it was perforated. The extraction of the head with the crotchet was a tedious and difficult operation. It proved that we formed a very erroneous idea of the case when we determined to use the forceps.

(CASE 35.) On the 11th of Aug. 1838, I was requested by Mr. Cocke, of Cleveland-street, to see a case of difficult labour, in which he had made an unsuccessful attempt to deliver with the forceps. It was the first child. The labour commenced at twelve o'clock on Wednesday, and had continued till five A.M., Friday. The forehead was behind the symphysis pubis, and for many hours the head had not advanced; it entirely

filled the cavity of the pelvis. Mr. Cocke had applied the blades of the forceps, and locked them with great care ; but though he made strong traction cautiously for a considerable time, the head could not be made to advance, and he had recourse to perforation. So great was the difficulty afterwards experienced in extracting the head with the crotchet, that he sent to request my assistance ; and I did not succeed without much difficulty in delivering with the craniotomy forceps. No mischief, I believe, followed.

(CASE 36.) Mr. Walker, of Marylebone-street, called me on the 11th of Aug. 1838, to deliver a woman, who had been thirty-six hours in labour. It was the first. She was a little woman, without being distorted : she had previously borne a dead child at the seventh month. The os uteri fully dilated : vagina not rigid : the head was in the pelvis, and lying transversely. There was no difficulty in applying and locking the blades of the forceps, and extracting the head ; but in doing this, the perineum was slightly torn. The child was alive, and the mother recovered, and suffered no great inconvenience from the injury she had sustained. The head had made no progress for several hours. The pulse was remarkably slow, and she was at times incoherent ; and between the pains she lay in a state approaching to insensibility. The state of the brain rendered it necessary to expedite the delivery.

(CASE 37.) In the month of Dec. 1838, a woman, æt. twenty-four, was admitted into St. George's Hospital, who had been delivered of her first child nine weeks before. The perineum, recto-vaginal septum, for about an inch and a half, and sphincter ani, were all destroyed, and the power of retaining the contents of the rectum entirely lost. The case admitted of no relief. This wretched state had resulted from laceration and sloughing of the parts, from the employment of the forceps in her first labour, and immense force exerted to extract the head. The child was dead.

(CASE 38.) In the summer of 1839, I saw a patient some miles from London, whose labour was protracted by a tumour within the pelvis, probably ovarian. She had been delivered before repeatedly, and all her labours had been natural. After she became pregnant on this occasion, she thought, from feeling two distinct swellings in the abdomen, that she had twins. When I first saw her, she had been in labour nearly twenty-four hours. The head had scarcely begun to enter the brim of the pelvis, the cavity of which was occupied by a tumour the size of a cricket-ball, or larger. Whenever a pain came on, the tumour was pressed down before the head. The forceps had been applied, but the head could not be brought before the tumour, though great and long-continued efforts had been made to drag it forward. I opened the head, and had much difficulty afterwards in drawing it down with the crotchet. In 1841, the same person being in the seventh month of pregnancy, Mr. Pickering, of Hammersmith, requested me to make an internal examination, to determine the propriety of inducing premature labour. As the tumour had risen out of the pelvis, had not enlarged, and the brim was occupied with the lower part of the uterus, I thought it best not to interfere. She went to the full period, and was safely delivered of a living child.

(CASE 39.) On the 8th of July, 1839, I saw a woman, æt. thirty-seven, who had been in labour with her first child about fifty hours. The os uteri was not fully dilated, and it was thick and rigid, and was pressed down with the head through the brim of the pelvis. Pulse 60, tongue loaded. The pains were strong and regular, but did not cause the head to advance. An attempt had been made to deliver with the forceps, but only one blade could be introduced. Four hours after, complete exhaustion. Perforation and extraction difficult.

(CASE 40.) On the 9th of July, 1839, at eleven A.M., I saw another case of protracted labour, in which it was proposed by the accoucheur, and urged strongly, to de-

liver with the forceps, though the head was so firmly impacted in the brim of the pelvis, that it was impossible to pass the finger around it without much difficulty, and giving great pain. The bones were squeezed over one another, and all the soft parts swollen and tender. It was the first child, and the labour had lasted the whole of the Sunday night and Monday until the Tuesday forenoon, when I first saw the case. The pulse was then excessively rapid, tongue loaded, countenance swollen ; great exhaustion. The meconium was passing, and the discharge from the vagina was foetid. Perforation. Extraction difficult. For several days after she was in a state of great danger from retention of urine, violent inflammation of the vagina, and fever. The parts did not slough.

(CASE 41.) On the 26th of July, 1839, another case, very similar to the preceding, occurred to me in private practice, but in it there was distortion of the pelvis, and a hard cicatrix of the vagina, the effect of injurious pressure in a former labour. Here also it was proposed to use the forceps.

(CASE 42.) On the 22nd of July, 1839, at three A.M., Mr. Webster, of Connaught-terrace, requested me to see Mrs. H—, who had been in labour thirty hours with her second child. A great part of the head was in the cavity of the pelvis, and an ear could readily be felt behind the symphysis pubis. The head had not advanced for many hours, and the pains, which had been declining in strength, had no effect in pressing it forward. The bones overlapped one another, and there was a large tumour of the scalp formed. The meconium was passing. It was evident the head would never be expelled by the natural efforts, and we determined to use the forceps, the blades of which were introduced and locked without much difficulty, and the head easily extracted. The child was alive, and the mother recovered in the most favourable manner. The benefit derived from the forceps was most striking in this case.

This patient, after being long in labour with her first child, and threatened with convulsions, was delivered by craniotomy. The head of the child was jammed in the brim of the pelvis, and an injudicious attempt to apply the forceps to the head having failed, it was opened.

(CASE 43.) On the 16th of Feb. 1839, Mr. Tucker consulted me respecting a case of puerperal convulsions. It was the first child, and no relief followed blood-letting and the other remedies employed. The head was within reach of the forceps, and the blades were applied and locked, but the head would not move, and the patient was so incessantly restless and agitated, that I did not persevere long, feeling certain that laceration would be produced if I did. Perforation. The patient continued in fits till she died.

(CASE 44.) On the 2nd of Aug. 1839, Mr. Kennedy of Tavistock-square, called me to see a patient, æt. thirty-one, who had been nearly sixty hours in labour with her first child. The head had passed into the cavity of the pelvis, where it was so firmly impacted, that it was evident the expulsion of it would never be accomplished by the natural efforts. I ascertained by auscultation that the child was alive. I had no difficulty in applying the blades of Smellie's short forceps covered with leather, the instrument referred to in all the cases now related. Half an hour at least elapsed before I could succeed in extracting the head, and this could not be effected without employing great force, much more than I would have ventured to employ had I not been certain, from hearing the pulsation of the heart of the foetus, that it was alive when the operation was commenced. The child showed no signs of life after birth, and inflammation and sloughing of the vagina followed. The bladder and rectum happily escaped uninjured. It would have been much better practice in this case, had I abandoned the attempt to deliver with the forceps, when the head could not be

extracted by moderate traction. The unwillingness to resort to craniotomy, knowing that the child was alive, led me to commit what I believe to have been a practical error, and which would have been avoided had the condition of the mother only been taken into consideration.

(CASE 45.) A lady, æt. thirty-seven, at the full period of her first pregnancy, under the care of Dr. G—, first began to experience labour pains at six A. M. of the 9th of May, 1840. The labour continued during the whole day and night, and during the following day till six P.M. The head of the child was then in the pelvis, and was much elongated and swollen. An ear was felt behind the symphysis pubis. The pains had for some hours been gradually becoming more and more feeble, and had ceased to press the head forward. The discharge from the vagina was offensive; the vagina hot and tender. The meconium escaping; the catheter required. No delirium. Dr. G. had applied the forceps, but finding much difficulty in locking the blades, had withdrawn them, and was of opinion, when we met in consultation, that it would be right to perforate without delay. Believing the child to be alive, I applied the forceps, and extracted the head in a few minutes, with less than half the force I had employed in many of the preceding cases. The cord was firmly twisted around the neck of the child, and it was dead. Inflammation and sloughing of the vagina followed, and the canal was afterwards nearly closed up by the cicatrix. This was overcome by bougies, and she became pregnant, and has since been safely delivered by Dr. G. of a living child without any artificial help whatever.

(CASE 46.) Sunday, 16th of May, 1841, a woman residing in Devonshire-street, nearly fifty years of age, had been in labour with her first child since the Friday evening before. She had been married fifteen years without ever becoming pregnant. The first stage of labour had been extremely protracted, from rigidity of the os uteri.

When I saw her the head had nearly cleared the brim, and an ear was felt. The vagina and perineum were so rigid, that it was resolved, before using the forceps, to see what the effect of a moderate bleeding would be. The pulsations of the foetal heart were heard, and there were no constitutional symptoms to render immediate delivery necessary. Six hours after the bleeding she had become greatly exhausted, and it was obvious the child would never be born by the natural efforts. The forceps was applied, and a living child extracted. Neither mother nor child sustained the slightest injury.

(CASE 47.) On the 14th Jan. 1841, in the St. Mary-lebone Infirmary, a woman, æt. thirty, had been twenty-four hours in labour. The head was pressing on the perineum. There had been no progress for some hours, and as the gentleman in attendance seemed impatient of delay, I applied the forceps, and easily extracted the child alive. But the operation, being unnecessary, was unjustifiable, and ought not to have been performed on the ground above stated.

(CASE 48.) In the summer of 1841, I attended a lady, æt. thirty, in private practice, who became completely exhausted after twenty-four hours of active labour with her first child. The first stage was quickly completed, and the head descended to the outlet, and pressed upon the perineum, but there was no power to effect its expulsion. It appeared as if the uterus had been destitute of the nervous energy required for the occasion. As the head was not large, and the outlet of the pelvis was not contracted, I thought artificial delivery necessary, and Mr. Blagden concurred in the opinion that the forceps should be applied, which was done with the utmost care. The child was extracted alive, but the head was much bruised, and one of the eyes narrowly escaped destruction. It, however, recovered perfectly, and the mother also.

(CASE 49.) On the 10th of Oct. 1841, Mr. Brett re-

quested me to see a patient in Berwick Street, æt. thirty, who had been twenty hours in her second labour. In her first, she been left nearly fifty hours, and when exhausted was delivered by craniotomy. On this occasion the os uteri was speedily dilated, but the head became impacted in the brim, and a cautious but unsuccessful attempt was made by Mr. Brett to draw it forward into the pelvis. When I saw the patient some time after, the head had descended so low that an ear was felt behind the pubes, though the head had not passed completely through the brim. The pains were violent and incessant, but they had little effect upon the head, and it appeared unsafe to leave her longer undelivered. I applied the forceps, and used as much extracting force as I thought justifiable, without effect, and was on the point of abandoning the forceps; Mr. Brett, however, made one strong effort more, and succeeded in extracting the head, without injury to it or the mother.

(CASE 50.) On the 13th of November, 1841, at two o'clock in the morning, a patient of Mr. Owen's, Holborn, in the seventh month of pregnancy, was alarmed with a smell of fire in her nursery. She left her bed, and ran hastily to her children, but it was a false alarm. Soon after, she was seized with convulsions, and at eleven A.M., when I saw her, she was insensible, and had experienced several severe fits. The pulse was 60, teeth clenched. Pupils constricted; breathing slow and sterterous. Another fit soon came on, when her head was suddenly drawn to the right side, the pupils became dilated, and the pulse and respiration quickened. Mr. Owen had taken blood from the arm soon after the first fit, given croton oil and calomel, and an enema, and applied vinegar and water to the head. Being a peculiarly thin delicate woman, more than ten additional ounces of blood could not be drawn with safety from the temples by cupping, the pulse becoming after its extraction so feeble as scarcely to be felt. At four, P. M., she was insensible, and the fits had been severe, with short in-

tervals. She had the appearance of a person dying from exhaustion. The pulse rapid and feeble. Mouth half open. Pupils contracted. The os uteri being fully dilated, and the head in the pelvis, I applied the forceps with great ease, and delivered ; but the child was dead. She never recovered her consciousness, and died in fifteen hours.

(CASE 51.) On the 14th of Jan. 1841, I delivered a patient of the St. Marylebone Infirmary, with the forceps. She had been twenty-four hours in her first labour. The head was at the outlet, lying across the pelvis. The meconium was passing, and the child had not been felt to move for many hours. In extracting the head, I saw the perineum would give way in spite of every precaution, and the blades were removed. In no long time the head was expelled by the natural efforts, but the child was dead.

(CASE 52.) Mr. Brett requested me, in 1841, to see a case of protracted labour under his care, in which we resolved to have recourse to artificial delivery. The patient was above thirty years of age, and it was her first child. The parts at the outlet of the pelvis were so unyielding that the head could not pass, and she became exhausted. The first stage had been very protracted, and blood-letting had been employed without much benefit. Mr. Brett applied the forceps, and extracted the child alive, and the mother sustained no injury.

(CASE 53.) On the 14th of July, 1842, Mr. Radcliffe had a lady, æt. forty, under his care, who became completely exhausted in twenty-two hours from the commencement of her first labour. She had been in very delicate health during the whole period of pregnancy, and in the latter months had become much emaciated, without any evident cause. The head of the child had been pressing for five hours against the soft parts at the outlet of the pelvis when I first saw her ; they were not rigid, and the finger could be passed around the

head without pain. The pulsations of the foetal heart could not be heard. There was a considerable discharge of blood between the pains. The pulse was feeble, countenance sunk, and breathing quick. The head was extracted with the forceps in ten minutes, but great care was required to prevent injury of the perineum. The child was dead. The placenta immediately followed, with a great coagulum of blood. The mother sustained no injury.

(CASE 54.) On the 12th of Aug. I delivered a patient of Mr. Fitzpatrick's with the forceps, but the child was dead. She was thirty-nine years of age, and it was the first child. The labour had lasted thirty-six hours. The head had been at the outlet of the pelvis for ten, during which time the pains had been strong and regular. Venesection had been employed without much effect. I thought it safer to extract the head than to allow it to remain longer in the pelvis, but the pressure of the blades must have been the immediate cause of its death, for it was alive a short time before the blades were introduced.

(CASE 55.) At half-past seven, A.M., on the 18th of Aug. 1842, I saw a case of protracted labour with Mr. Beale. The lady was thirty years of age, and had been in labour with her first child upwards of twenty-four hours; the pains had been strong and regular for sixteen. The head, surrounded with the os uteri, was pressed considerably into the pelvis, but an ear could not be felt. An enema was administered, and the case was left to the natural efforts till five in the afternoon, when the os uteri was fully dilated, but the head had advanced so little, that an ear was still felt with difficulty. A great tumour had formed under the scalp. The pains had diminished so much in force, that it was obvious the head would never pass without assistance. The child was extracted alive with the forceps, but the perineum was slightly torn as it passed, which was unusually large.

In more than twenty cases of protracted labour where it had been proposed to deliver with the forceps, the histories of which it would be tedious to relate, I recommended delay, and they all terminated favourably without artificial assistance.

Five of the mothers whose cases have now been related, died from puerperal convulsions, and four from the rash and inconsiderate use of the forceps. Seven had the perineum more or less injured, one the recto-vaginal septum torn, five were left with cicatrices of the vagina after sloughing, and one with an incurable vesico-vaginal fistula. In none did any benefit result from the instrument before the greater part of the head of the child had passed through the brim of the pelvis, and the orifice of the uterus was fully dilated. In one case only was the employment of the forceps advantageous, where the blades were applied and locked with great difficulty, and great force required to extract the head of the child. Seventeen of the children were born alive and lived.

In protracted labours, when the head has made no sensible advance for hours, and becomes compressed, the scalp puffy and swollen, the vagina dry, hot, and tender, the discharges offensive, and when the bladder cannot be emptied without the catheter, it is dangerous to trust longer to the natural efforts. If along with these symptoms, there is tenderness of the abdomen, fever, incoherence, restlessness, and exhaustion, delaying long to deliver is invariably followed by the most injurious consequences, as the cases related in the next Report sufficiently prove.

## SECOND REPORT.

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DIFFICULT LABOURS FROM DISTORTION OF THE PELVIS, SWELLING OF THE SOFT PARTS, CONVULSIONS, HYDROCEPHALUS IN THE FœTUS, AND OTHER CAUSES, IN WHICH DELIVERY WAS EFFECTED BY THE OPERATION OF CRANIOTOMY.

(CASE 56.) Mack, 86, Monmouth-street, æt. twenty-four, 28th July, 1824. First labour, sixty-seven hours. Pelvis and extremities distorted by rickets. Extraction with the crotchet tedious and difficult. Followed by slight uterine inflammation. Recovered.

(CASE 57.) Bryant, No. 10, Tottenham-place, 1st Aug. 1824. Duration of labour, forty-eight hours after rupture of the membranes. Face presentation. Delivery followed by uterine haemorrhage. Recovered.

(CASE 58.) Manning, æt. twenty-two, No. 131, Drury-lane, 2nd November, 1827. First labour, duration three days. Head and arm presenting. Many strong efforts made to turn during twenty-four hours by the accoucheur. Child dead. Head opened and drawn down with the arm. Followed by severe inflammation of the uterus. Recovered.

(CASE 59.) ——, æt. thirty, No 2, Conway-street, 2nd March, 1828. Third labour, forty hours. Membranes ruptured, and first stage completed in fifteen hours. Head long fixed in the brim. V. S. Enemata. Exhaustion. Extraction difficult. Recovered.

(CASE 60.) ——, St. James's Infirmary, Feb. 29th, 1828. First labour, duration thirty-six hours. Head many hours impacted in the brim. Vagina swollen and tender. Retention of urine. Pulse rapid and feeble. Great exhaustion. Delivery not difficult. Recovered.

(CASE 61.) ——, æt. 35, Holles-street, Clare-market, 6th August, 1828. Duration of labour twenty-four hours. Enormous œdematosus swelling of thighs and external parts. A large exomphalos. Head in the pelvis, and an ear felt. Attempts to deliver with the vectis and forceps, failed in consequence of the swelling. Recovered. Had mania after a former delivery, and has a child maniacal.

(CASE 62.) Davis, æt. twenty, No. 9, Orange-street, Leicester-square, 27th March, 1829. First labour, seventy-two hours duration. Os uteri rigid and partially dilated. Head compressed in the brim. Pulse rapid. Tongue loaded. Abdomen tense and painful. Retention of urine. Delirium; exhaustion. Perineum slightly lacerated in extracting the head. Great inflammation and sloughing. Died.

(CASE 63.) ——, æt. thirty, No. 6, Brewers-court, 29th April, 1829. First labour. Liquor amnii discharged six days. Pains, after being strong and regular during twenty-four hours, ceased. Head fixed in the brim. Child dead. Bladder distended. Catheter cannot be passed. Patient recovered.

(CASE 64.) ——, æt. twenty-two, No. 7, Little Denmark-street, 14th September, 1829. First stage very protracted. Vagina forcibly dilated with the hand of the midwife. Head of the child has passed into the pelvis. Labia swollen to the size of a child's head, so that neither the vectis nor forceps can be used. Gangrene of vagina and external parts. Died.

(CASE 65.) ——, æt. thirty, St. Marylebone Infirmary, 13th September, 1832. First labour, thirty-six hours duration. Great distortion of pelvis. Patient recovered.

(CASE 66.) Brookes-mews. First labour, forty-eight hours duration. No progress for eighteen hours. Os uteri imperfectly dilated. Head fixed in the brim. An unsuccessful attempt to apply the forceps. Great force required to extract. The pelvis was small. Recovered.

(CASE 67.) Saint Marylebone Infirmary, 5th July, 1833. First labour. Great protraction. No progress for twenty-four hours. Head above the brim. Orifice partially dilated. Rapid pulse, exhaustion, incoherence. Patient recovered.

(CASE 68.)  $\text{\AA}$ Et. thirty. Paddington, under the care of Dr. Girdwood: 11th November, 1833. First labour, duration forty-six hours. Small pelvis. V. S. Ergot. Membranes artificially ruptured. Os uteri rigid. Great swelling of vagina. Retention of urine. Cessation of pains. Child very large. Recovered.

(CASE 69.)  $\text{\AA}$ Et. thirty, Clarence-gardens, 31st Dec. 1833. First labour, continued Sunday, Monday, and Tuesday. Pains gone. Great restlessness and incoherence, and great swelling of the soft parts: forceps unsuccessful. Cord round the neck tightly. A second child. Recovered.

(CASE 70.)  $\text{\AA}$ Et. thirty-five, Paddington. Dr. Girdwood. Violent puerperal convulsions. Not relieved by V. S. No fits after delivery. Recovered.

(CASE 71.) Gresse-street, with Mr. Balderson, 8th May, 1837. Funis prolapsed, and without pulsation. Edge of placenta felt at the os uteri. Hæmorrhage, and no pain for many hours. Os uteri half dilated. Perforation twenty-four hours after labour commenced. Recovered.

(CASE 72.) St. Ann's Workhouse, with Mr. Jones, 15th August, 1837. Puerperal convulsions. No relief from copious V. S. Fits ceased soon after delivery. Recovered.

(CASE 73.) Castle-street, Leicester-square, with Mr. Roach. 1833. Second labour. Uterus ruptured spontaneously after labour had continued twelve or fifteen hours.

Head receded. Vomiting. Slight haemorrhage. Cessation of pain. Hurried respiration. Sunk countenance. Pressure made on the fundus uteri during perforation. Head extracted without much difficulty. Died within twenty-four hours, and a great rent found in the uterus.

(CASE 74.) Borough of Southwark, with the late Mr. Millard, 1st July, 1833. Distortion of pelvis. Head perforated and extracted, after great protraction, by Mr. Millard. Shoulders jammed in the brim, and head nearly separated from the trunk. I passed up the crotchet, and fixed it in the thorax, and delivered. A quantity of foetid gas afterwards escaped from the uterus. Recovered.

(CASE 75.)  $\text{\AA}$ Et. thirty-two, 9, Duke's-row, St. Pancras, with Mr. Kennedy, 9th March, 1838. First labour, liquor amnii discharged six days. Head half through the brim for thirty hours. Os uteri partially dilated, and vagina swollen and tender. Great thirst, vomiting, exhaustion. Retained placenta, and hemorrhage. Recovered.

(CASE 76.) Mrs. ——,  $\text{\AA}$ Et. twenty, 3rd April, 1828. In labour with her first child from Monday till Thursday night, under the care of a midwife. The navel string without pulsation prolapsed. Brim and outlet of pelvis distorted. Head of the child has not entered the cavity of the pelvis. Os uteri only partially dilated. Vagina swollen and tender. Pains have been gradually diminishing in strength and frequency. Dr. H. Ley saw her with me, and approved of immediate delivery by craniotomy. The bones of the cranium were all torn away with the crotchet, before I succeeded in drawing the base of the skull through the brim of the pelvis. The point of the crotchet being fixed on the outside of the head near the left angle of the lower jaw, its extraction was at last accomplished. Great force was afterwards required to drag the shoulders into the cavity of the pelvis. Though the parts within the

pelvis must have been severely contused during the operation, no bad symptoms followed, and this patient has again been delivered at the full period by craniotomy.

(CASE 77.) On the 18th Nov. 1828, I was called to Mrs. Freer, 61, St. John-street, Smithfield, with protracted labour. The membranes had been ruptured two days before, and the labour pains had been regular ever since that occurred. The os uteri was about half dilated, and the head had scarcely entered the brim of the pelvis. It was evident that the head could not pass without being lessened in size. The operation of craniotomy was difficult, and there was an attack of uterine inflammation afterwards experienced, from which she recovered slowly. The late Mr. Baker assisted in extracting the head. This patient had a lateral curvature of the spine, from an early period of life, and had been delivered by craniotomy, five years before.

(CASE 78.) Mrs. Freeman, 17, Duke's-court, Drury-lane, 19th Sept. 1828. Has had several living children. The last labour was so difficult, that the head of the child was opened. She has now been two days and two nights in labour. Membranes ruptured thirty-six hours ago. Head firmly compressed between the sacrum and pubes; a great swelling upon the scalp, and has not advanced for twenty-four hours. Vagina swollen and tender. Pains becoming weaker. No attempt to deliver with the forceps or vectis. Great force was required to extract the head after being opened. Right parietal bone of the child depressed and fractured.

(CASE 79.) On the 27th of Dec. 1829, I was called to a woman in labour with distortion of the pelvis, residing in Golden-ball-court. It had lasted upwards of forty-eight hours. The head was wedged in the brim, and from her exhausted state, it was evident artificial delivery was immediately required. She recovered favourably after perforation. It was her second

child, and the first had likewise been delivered by craniotomy.

(CASE 80.) On the 13th Sept. 1832, I was called to a patient in the lying-in ward of the St. Marylebone Infirmary, who had been thirty-six hours in labour with her first child. There was great distortion of the pelvis from rickets in infancy. The perineum and vagina were rigid; the os uteri not more than half dilated, and the whole head of the child above the brim of the pelvis. The pulse was rapid, face flushed, and abdomen tender. I first dilated the external parts gently, then passed forward the fore and middle fingers of the left hand to the head, and along these slid up the perforator, and opened it, and then destroyed the brain. I found it impossible to pass up the craniotomy forceps, and fix it upon the head, and extraction was slowly effected with the crotchet. It was necessary, while operating with the crotchet, to pass nearly the whole of the left hand into the vagina, that the forefinger might reach sufficiently high to guard the point of the instrument, which was passed through the opening in the skull. The operation lasted two hours, and the bones of the skull were all torn to pieces, before the head could be extracted. Dr. James Jackson, of Boston, United States, whose premature death many have lamented, was present, and after the delivery was accomplished, he informed me, that distortion of the pelvis was rare in America, and that his father had been thirty years in extensive practice at Boston, and had never met with a case of difficult parturition requiring the operation of craniotomy.

(CASE 81.) On the 15th March, 1832, I saw Mrs. Kirby, æt. twenty-nine, residing in Gees-court, Oxford-street, who had been more than forty-eight hours in labour with her first child. She was extremely exhausted, and the pains, which had long been regular and strong, had nearly gone off. The outlet and brim of the pelvis were both considerably distorted, and as

the greater part of the head was still above the brim of the pelvis, and the soft parts were swollen and tender, delivery was immediately accomplished by craniotomy. The difficulty experienced in extracting the head with the crotchet after it was opened, proved that delivery could not have been completed by any other method, and the child, if alive, could not have been preserved. This patient again became pregnant, and I proposed to induce premature labour on the 21st of July, 1835, when she was seven months and a half pregnant ; but she would not consent to this. Labour came on spontaneously, at the commencement of the ninth month of pregnancy : a foot presented, and the child was extracted dead, without craniotomy.

(CASE 82.) Mrs. Kirby came into the St. Marylebone Infirmary, May 23rd, 1834, in labour at the full period. I was called to see her early in the morning, and found the os uteri fully dilated, the membranes ruptured, and the head firmly fixed in the brim of the pelvis. The pains were frequent, and very strong. At eleven P. M., six hours after, the pains continued with increased violence, and the head was still more firmly jammed in the pelvis. A large swelling had formed under the scalp, and the meconium was escaping from the vagina. Two strong fits of convulsion had been experienced, for which a copious venesection had been employed. I found her completely insensible, with dilated pupils and constant convulsive movements of the muscles of the face. The pains continued with such violence, and recurred at such short intervals, that I dreaded rupture of the uterus. At three P. M. other two strong convulsion fits had occurred, and the head having made no progress, I determined to deliver by craniotomy. After the head had been perforated and drawn into the cavity of the pelvis with the crotchet, it was easily extracted with the craniotomy forceps. The small size of the pelvis, the impossibility of applying the forceps to the head, the imminent risk of rupture of

the uterus, with the result of the former labour, were the circumstances which made me to determine to open the head. The induction of premature labour was again recommended to this patient, but without success, and she again became pregnant, and went to the full period.

(CASE 83.) Mrs. Kirby, the same patient, came again into the lying-in ward of the St. Marylebone Infirmary, on the 3rd December, 1836. Labour had commenced early the preceding day, the liquor amnii escaped soon after, and the pains had continued strong and regular during the whole night. On the morning of the 8th, I received a note from Mr. Sandford, requesting my immediate attendance. The head of the child had long been firmly fixed in the brim of the pelvis ; the ear could not be felt ; the vagina was hot, tender, and swollen. The countenance was flushed, and she was occasionally delirious. The abdomen tense. She expressed her conviction, when free from pain, "that she would soon burst if not delivered." I perforated the head without delay, and readily extracted it with the craniotomy forceps. The placenta was expelled soon after, and she recovered.

(CASE 84.) Mrs. Crowther, æt. forty-five, December 6th, 1830 ; No. 9, Tavistock-mews, Little Coram-street. Has had nine children. All her labours have been difficult, and the two last so much so, that artificial assistance was required, and the children were still-born. Labour commenced on the 3rd inst, and the membranes were soon after ruptured. The pains were continuing feeble and irregular during the 4th, and the labour having made but little progress, thirty-five drops of laudanum were given by the midwife in attendance. The pains entirely ceased until the morning of the 5th, when they returned, but feebly and irregularly. At 10 p. m. two doses of the ergot of rye were given, and soon after, several strong forcing pains were experienced. The movements of the infant were not felt

after this, and no uterine contraction has taken place to this hour, 11 A. M. Monday, 6th December, when I first saw her. The discharge from the parts is become offensive; bladder filled with urine. The vagina is swollen and tender. The head, greatly swelled and compressed, is firmly fixed in the brim of the pelvis, and the finger cannot be passed around it without occasioning great pain. The ear could not be felt, the greater portion of the head being still above the brim. After the head had been opened, two hours elapsed before I could extract it with the crotchet. 7th December. A bad night. Retention of urine. Great swelling and tenderness of the parts. Pulse rapid, tongue loaded, headache, rigors. Sloughing of the vagina took place, and on the 14th a fistulous communication had been formed between it and the bladder. This unfortunate woman was soon after deserted by her husband, and has led a life of great indigence and misery ever since.

(CASE 85.) On the 18th August, 1829, a middle-aged woman who had suffered severely in former deliveries, being at the full period, was seized with the pains of labour yesterday morning at one o'clock. Last night the head of the child had begun to enter the brim of the pelvis, the os uteri being thin, soft, and considerably dilated. Labour pains continued strong and regular during the whole night. At seven o'clock this morning the pains had entirely ceased, there was an offensive yellowish coloured fluid discharged from the vagina; the pulse was rapid, and symptoms of exhaustion had appeared. The child had not been felt to move for two days, and the meconium was passing freely. I opened the head, and easily extracted it. A quantity of a peculiarly foetid gas and offensive fluid, like coffee and milk, escaped after the delivery of the child. The placenta was soon after expelled. Sloughing of the vagina took place in this case, and a small fistulous opening was formed between the bladder and

vagina. In this and the preceding case a great error was committed in not delivering earlier.

(CASE 86.) A dwarf from the Mauritius, Santiago de los Santos, married an Englishwoman at Birmingham, whose height was three feet and three inches. She became pregnant, went to the full period, and was in labour at Chelsea on the 14th of April, 1835, under the care of Mr. Bowden. Dr. H. Davies was consulted, and finding the pelvis greatly distorted, he opened the head of the foetus on the afternoon of the 15th of April, and removed with the crotchet a part of the cranium. At nine P. M. we proceeded together to complete the delivery with the crotchet, the outlet and brim of the pelvis being so contracted that all the varieties of craniotomy forceps were perfectly useless, as they could not be applied. The operation lasted nearly five hours, and the head of the foetus could not be drawn through the brim of the pelvis, until the bones of the base of the skull were all torn to pieces with the crotchet; the point of which was generally passed up on the outside of the head. An arm was next drawn down, and the thorax torn open and all the viscera extracted. So great was the degree of distortion, that the pelvis of the child could not be drawn through the brim of the mother's pelvis till after long-continued efforts with the crotchet. We were both thoroughly exhausted before the delivery was accomplished, and it seemed at first impossible by any means to extract the child without producing fatal contusion or laceration of the uterus and vagina. On the 12th of May, the patient was walking about, and perfectly well. From this and similar cases, I am convinced that the crotchet is the only instrument that can be used effectively to extract the head after perforation, where the pelvis is greatly distorted. The undilated state of the os uteri, and the contracted brim and outlet, render it impossible to introduce the blades of the craniotomy forceps, to grasp the head, till it has been drawn by the crotchet.

into the cavity of the pelvis. Then it is possible to employ the craniotomy forceps with great advantage, and to draw the head through the outlet of the pelvis with far less risk to the mother than if the crotchet alone were employed, and the perineum supported by an assistant.

(CASE 87.) On the 8th July, 1835, Mr. White, Lamb's-conduit-street, called me to deliver a woman æt. twenty-six, distorted by rickets in infancy, who had been in labour with her first child nearly sixty hours. The os uteri was thin and dilatable, but not fully dilated. The head presented, and had not entered the brim. The discharge from the uterus was yellow and fœtid, and the movements of the child had not been felt for three weeks. I opened the head at one o'clock, but four hours elapsed before the delivery could be completed. After all the bones of the skull had been torn to pieces with the crotchet in extracting, I passed the crotchet up between the head and the uterus, to fix its point on the face or in one of the orbits. Unfortunately the point of the instrument came in contact with an arm, instead of the outside of the head, and the slightest force brought the arm into the vagina, and converted the case into one of arm presentation, the head having immediately gone up beyond the reach of the crotchet. I passed the hand into the uterus to bring down the feet, but the utmost difficulty was experienced in accomplishing the operation of turning, from the shoulder and trunk of the child occupying the brim of the pelvis. She recovered, after an attack of uterine inflammation. This is the only case in which any mischief resulted from passing the crotchet on the outside of the head, as recommended by Smellie; and with a little more caution, I feel convinced that the accident might have been altogether prevented.

(CASE 88.) March, 1831, Dr. Duffin requested me to see a case of protracted labour, at 46, Old Compton-street. The labour had continued two days and nights. The

pains, which had at first been strong and regular, had declined in strength as the head became more and more firmly impacted in the pelvis. There had been no progress for twelve hours. Pulse rapid; abdomen tense and tender on pressure. Great thirst, restlessness, and excessive despondency. Blood-letting and opiates had been employed. After the perforation, so much force was required to extract the head, as to make it certain that the head could never have been extracted without its size being reduced.

(CASE 89.) In the St. James's Infirmary, five A. M. 27th March, 1831, I saw a young woman who had been three days in labour. The vagina and external parts were much swollen, the discharge was offensive and mixed with meconium. The head of the child was so low in the pelvis, that an ear was felt, but it was so closely surrounded by the inflamed vagina, that the finger could not be passed up around it without causing great pain. Believing the child to be dead, and that it was impossible to apply the forceps without injury to the mother, I opened the head, and had some difficulty in extracting it. Retention of urine, and violent inflammation and sloughing of the parts followed. The bladder fortunately escaped. There is a firm, hard, extensive cicatrix left in the vagina.

(CASE 90.) At nine A. M., on the 6th March, 1831, I was called to a case of protracted labour, at No 4, Jones's-court, Bainbridge-street. The patient had been three days in labour. The membranes had given way on the 4th, and the pains had been strong and regular during the whole of the 5th, and then declined. Ergot was given in repeated doses, and an attempt made to deliver with the forceps. I found the head at the external parts, but the tumefaction of the labia and vagina was such, that the blades of the forceps could not be introduced. The point of the finger could not be passed between the head and soft parts. It was the first child, and there was reason to believe that it

was dead. Retention of urine, and sloughing followed delivery, which might have been expected from the duration of the labour and the condition of the parts.

(CASE 91.) At five A. M. 17th February, 1831, called to a woman at No. 8, Mortimer-street, Tottenham-court Road. The pelvis was slightly distorted. The head of the child had been in the brim without advancing for many hours, it was swollen and compressed, and the vagina was hot and tumid. Pains nearly gone. Great excitement of the heart, and determination of blood to the head, with delirium. After V. S. an unsuccessful effort had been made to deliver with the vectis. She recovered well.

(CASE 92.) A case of very protracted labour occurred in the lying-in ward of St. Marylebone Infirmary, on the 5th of July, 1833. It was the first child. The os uteri was only partially dilated, and the back part of the head was above the brim. No ear felt. No progress for twenty-four hours, when she became completely delirious, and the pulse very rapid and feeble. Consciousness returned next day, and she recovered.

(CASE 93.) In 1832, a case of very tedious labour occurred in Paddington-street, in which the bladder was allowed to become enormously distended. The head had been long wedged in the brim, and the soft parts, when I first saw her, were hot and swollen. The catheter could not be passed into the bladder till the volume of the head was lessened. A great quantity of foetid bloody urine was then drawn off. She subsequently died from inflammation of the bladder. It was proposed to give ergot in this case a short time before she was delivered.

(CASE 94.) On the 10th of May, 1835, I was called by Mr. Jones to a case of labour which had lasted fifty hours. First child. She was an indolent, corpulent person, who had been accustomed to drink large quantities of beer. The greater part of the head was above the brim. The head and soft parts much swollen. Pains

gone. The forceps could not be applied. Recovered.

(CASE 95.) On the 23rd of June, 1835, St. James's Infirmary. A woman, after being above forty-eight hours in labour, had retention of urine, great swelling of the vagina, and head of the child, which was firmly squeezed in the brim of the pelvis, and was not sufficiently advanced for the forceps. I passed the catheter, as I believed, into the bladder, but when there flowed through it a yellowish foetid fluid with bubbles of air, I suspected that it had passed into the uterus, which was the case. On pressing back the head, a foetid gas escaped from the uterus. After drawing off the urine, and observing that the pains were very feeble, and that the head would never be expelled by the natural efforts, its bulk was diminished, and the extraction effected by the crotchet. Recovered.

(CASE 96.) Pimlico, 23rd October, 1839. First labour. Three days and nights duration Head firmly impacted in the brim, and swollen. Vagina tender and puffy. Retention of urine. Fever, tenderness of abdomen, great restlessness. Foetal heart not heard. Meconium passing. Sloughing, and vesico-vaginal fistula. Recovered.

(CASE 97.) On the 13th January, 1840, a patient of the St. Marylebone Infirmary, with slight distortion of the pelvis, was in labour, and the face presented, and became jammed in the brim. Violent uterine action was allowed to continue for hours, when the right labium became enormously distended with blood, and burst on the inner surface, and a great hemorrhage took place. The discharge of blood was checked by strong pressure with a sponge over the rent, while I opened and extracted the head.

(CASE 98.) Strand, with Mr. Radcliffe. 1st of February, 1840. First labour. First stage completed, and head far advanced into the pelvis in twenty-four hours. Labour had continued for twenty-nine hours

longer without any advance of the head. Vagina swollen.  
Fever and exhaustion. Recovered.

(CASE 99.)  $\text{\AA}$ Et. twenty-six, Harrow-road, with Dr. Girdwood, 14th of April, 1840. First labour. In labour three days. Os uteri rigid, and partially dilated. Head compressed in the brim. Vagina hot and swollen. Offensive discharge. Fever and exhaustion. Recovered.

(CASE 100.)  $\text{\AA}$ Et. thirty-eight. Eaton-square, with Mr. Jorden, four p. m. 11th of February, 1841. First labour, thirty-eight hours. Os uteri rigid, and not half dilated. Head has scarcely entered the brim. Pulse one hundred, full and strong. V. S.,  $\frac{3}{4}$ xxx. starch and laudanum glyster. Four a. m. 12th of February. Os uteri more dilated, and head firmly pressed into the brim; bones overlapping, ear not felt. Great tumour of the scalp. Vagina swollen. Exhaustion. No room for the blades of the forceps. Mr. Jorden delivered, and the patient recovered most favourably.

(CASE 101.)  $\text{\AA}$ Et. twenty-three. No. 9, Villiers-street, with Mr. Radcliffe. Membranes ruptured at five p. m., 7th of July, 1840. Feeble irregular pains soon after, and during the night. The labour went on during the 8th, and at six a. m. of the 9th, I found the head deep in the pelvis, but not pressing against the parts at the outlet; the ear not felt. Great swelling of the vagina and external parts, and pressure on the bladder. Meconium escaping, foetal heart not heard, and movements of foetus not felt for three days. The head had not advanced for twenty-four hours. Exhaustion. Extraction tedious. Recovered favourably.

(CASE 102.)  $\text{\AA}$ Et. forty. Cochrane Terrace, with Mr. Crelin, 31st of December, 1840. First labour, duration forty hours. Orifice partially dilated, head entirely above the brim. Meconium passing; foetal heart not heard. Exhaustion. Great force required to extract. Recovered.

(CASE 103.) The same patient, æt. forty-one. 13th of June, 1841. Second labour. Head and right arm presenting. Os uteri half dilated. Liquor amnii long discharged. Child dead. Preferred perforation to turning. Recovered.

(CASE 104.) On the 14th of September, 1841, I saw a lady æt. twenty-two, who had been in labour from Saturday till Tuesday evening. The pains had gradually been diminishing in strength and frequency, the pulse was very rapid, and the brain much disturbed. The head of the foetus, much swollen, was fixed in the brim of the pelvis, and had not advanced for many hours. The vagina swollen and tender, and the discharge extremely foetid. The catheter had been repeatedly introduced, and the urine drawn off had also become foetid. The pulsations of the foetal heart were not heard, and the symptoms were so urgent as to render immediate delivery by perforation necessary. She recovered without sloughing after the operation. In this case the impossibility of delivering with the forceps was obvious, and it would have been justifiable at an earlier period to have lessened the head, as her medical attendant thought necessary.

(CASE 105.) Dr. Corrie, of Finchley, called me, on the 30th of October, 1841, to a case of labour protracted beyond thirty hours. The head was strongly compressed in the brim, and the os uteri not fully dilated. Pulse one hundred and forty. Pains, after having been strong and regular, nearly gone, and she appeared completely worn out. The head required great force to extract it, after perforation. Recovered.

(CASE 106.) Called by Mr. Boote, to a young woman with very protracted labour. The soft parts were immensely swollen, the discharge foetid, the head compressed in the brim. Retention of urine, and catheter could not be passed. Pulse rapid; tongue loaded; face flushed. Delirious. Two hours required to extract

the head with the craniotomy forceps. Retention of urine and sloughing of the vagina followed. The bladder and rectum escaped. Recovered.

(CASE 107.) *Æt.* thirty-six, No. 4, Sanford-street, with Mr. ——, Tuesday, 12th of January, 1841. Labour commenced on Friday, the 8th. The pains were feeble during the Saturday. They became stronger on Sunday, and continued regular the whole of Sunday and Monday. At six A. M. Tuesday, 12th, the head was firmly wedged in the brim, and not one half had passed. The bones squeezed over one another, as if by a heavy weight laid over the parietal bones. *Os uteri* widely dilated. Vagina swollen and tender. Bladder half filled, and the catheter will not pass. Offensive discharge from vagina with meconium. Movements of child not felt for many hours; foetal heart not heard. Tongue very loaded. Great difficulty in extracting the head. Perineum slightly lacerated. Retained placenta and slight hemorrhage. This patient died in a few days from uterine inflammation. She was left, I think, too long in labour.

(CASE 108.) With Mr. Johnson, Grosvenor-street West, saw a patient, *aet.* twenty-five, at No. 27, Market-street, Edgeware-road. Three A. M. April, 1st, 1841. The head, hand, and funis without pulsation, presented, and had not passed the brim. After the labour had continued forty-eight hours, she began to wander. Extraction easy. Recovered favourably.

(CASE 109.) *Æt.* twenty-six. Knightsbridge with Mr. R. Brown. First labour commenced at midnight, 3rd May, 1841. Membranes ruptured two days before. At four A. M. on the 4th, orifice fully dilated, pains strong and regular. In the afternoon bones of head overlapping and becoming impacted in the brim, ear not felt. In the evening the finger could be passed easily around it. Frequent hiccup. Feverish. Mecconium passing. A peculiar nervous irritability. Pains regular; foetal heart heard. No symptom rendering

delivery immediately necessary. A small bleeding at ten P. M. At five P. M. 5th of May; no progress, head jammed in the brim, foetal heart not heard. Rapid pulse; great restlessness, exhaustion, and delirium; so much force required to extract the head, that it was obvious it never could have been delivered with the forceps, or expelled by the natural efforts. This patient recovered without a bad symptom, but it would have been better practice had she been delivered earlier, and she would have been so, had it not been certainly known that the child was alive on the morning of the 5th. In the hope of saving the child, the mother's life was exposed to danger.

(CASE 110.) Eight P. M. 5th of September, 1841. Mr. Skegg requested me to see a patient under his care, whose labour had commenced twenty hours before. In her first labour the perineum, a portion of the recto-vagina septum and sphincter ani, had been destroyed eleven years before. I found the head at the outlet of the pelvis, with the forehead under the symphysis pubis, and the occiput in the hollow of the sacrum, and it had been in this situation for seven hours, to the great danger of the remaining part of the sphincter and recto-vaginal septum. I advised waiting for a time, and not interfering, in the hope that the forehead would slide out under the symphysis, and the parts behind escape. The position of the head could not be altered with safety, and it would have been rash and unwarrantable to apply the forceps. In a few hours the child passed out, and no additional injury whatever was inflicted on the mother.

(CASE 111.) Mr. Thomas, Vauxhall-road, called me on the 14th of October, 1841, to a case of protracted labour. The patient was æt. thirty-one, and was of very short stature, though the bones of the extremities were not bent. Labour began on the Saturday night, and continued till the following Wednesday, at two P. M. when I first saw her. The pains had been febl

and irregular, and she was not exhausted even then, but was able to sit up and walk about the room. Os uteri not half dilated, the head had not begun to enter the brim, and the catheter was not required. The pelvis was contracted at the upper aperture, and I thought it extremely probable the head would not pass till perforated; but as there were no local or constitutional symptoms which justified interference, I recommended for some time longer to see what nature would do. Little change took place till the following morning, when the head became swollen and compressed in the brim, though the os uteri was still imperfectly dilated. The pulse became rapid and feeble, and she was occasionally incoherent. As soon as these symptoms appeared, Mr. Thomas immediately sent to me, and I went without delay and delivered with the perforator and crotchet, but she died in twelve hours. The result of this case would probably have been very different had we proceeded to deliver twenty-four hours sooner, and I can never think of it without regret.

(CASE 112.) St. Marylebone Infirmary, 5th of December, 1841. First labour. Great distortion of the bones of the lower extremities and pelvis. After being in labour about forty-eight hours, and no part of the head having entered the brim, and the os uteri not being fully dilated, and the pains threatening rupture of the uterus, the head was opened, and the extraction required great force. Both the brim and outlet were much distorted. Recovered.

(CASE 113.) On the 12th of February, 1842, I delivered a woman æt. nineteen, in the lying-in ward of the St. Marylebone Infirmary, whose pelvis and extremities were distorted by rickets. The labour began on the 9th of February. The membranes ruptured on the 10th. On the 11th the os uteri was not dilated to the size of half-a-crown, the head was wholly above the brim, and the base of the sacrum easily felt. Active pains came on, and lasted during the night, and till

two p. m. of the 12th. The os uteri was still very imperfectly dilated. The head entirely above the brim, now much swollen. It was clearly right to interfere, which I did, and she recovered without a bad symptom, though I now feel persuaded that she ought not to have been left so long in labour. The danger of rupture and fatal contusion of the uterus is great in all such cases, and delivery should be effected as soon as it is evident the head cannot pass. I knew from the first, in this case, that it would not pass through the brim, but was prevented from interfering in consequence of hearing the pulsations of the foetal heart. Drs. Boyd Hunter, and Ballard, saw this case.

(CASE 114.) On the 4th of June, 1842, Mr. Turner, of King-street, Bloomsbury, called me to a case of very protracted labour. It commenced on the Tuesday night, and continued till the Saturday at six a. m., during the whole of which time the patient had enjoyed no sleep, yet continued without any symptoms requiring interference. She then became exhausted : the discharge was very offensive, meconium passing freely, the bulky part of the head greatly compressed and swollen and still above the brim ; an ear not felt without difficulty. Orifice widely but not completely dilated. Movements of the child not felt by the mother since the commencement of labour. The sound of the foetal heart not heard. There could be no doubt about the necessity of speedily putting an end to the labour, and I felt no hesitation, and Messrs. Turner and Jones coincided with me, in thinking that the sooner the head was opened and extracted the better. This was done, the placenta was detached and expelled without hemorrhage, and the patient recovered in the most satisfactory manner. I have omitted to mention, that in this case there was a peculiar thickening at the upper and back part of the vagina, which seemed to arrest the progress of the head.

(CASE 115.) On the 18th of July, 1842, with Mr. Ni-

cholles, Leicester-place, I saw a case of protracted labour. First child ; aet. twenty-six. The labour began on the Saturday night, with slight pains at intervals : no sleep. On the Sunday morning the os uteri was dilated to the size of half-a-crown. The labour continued till the Monday morning, when she complained of acute pains about the lower part of the uterus, and internal heat. V. S. to ten ounces. A grain of calomel and opium, which were followed by some sleep. Pulse seventy-nine. I saw her at eleven P. M. on Monday, when the countenance was good ; head clear. Tongue clean. Pulse one hundred and ten, rather feeble ; skin hot. The greater part of the head above the brim, bones squeezed in it, and some difficulty in passing the fingers around it ; an ear not felt. A great swelling under the scalp. Os uteri thin and soft, almost fully dilated, but the head still surrounded by it. Little or no uterine contraction. The heart of the child heard beating. At five A. M. the following morning. Great quickness of pulse, and confusion of head. Completely exhausted. Not the smallest progress. Head more swollen and compressed. Vagina hot, puffy, and tender. The force required to extract the head after perforation, rendered it obvious that the head could never have passed in the exhausted state in which she was. No bad symptoms followed.

(CASE 116.) On March the 12th, 1828, I was called to an unmarried lady, whose abdomen had been slowly enlarging for several months. No suspicion having been entertained by her medical attendant that she was pregnant, mercury, diuretics, and the strongest cathartics had been given to remove the supposed dropsy, and tapping proposed. When I examined the abdomen, the fluctuation was as distinct as in any case of ascites, and the right lower extremity was œdematous. Having received a hint from her nurse that pregnancy was possible, I examined and found the os uteri considerably dilated, and the membranes protruding. The

presenting part of the foetus could not be felt. Labour pains having come on, and continued at long intervals during the night, I ruptured the membranes the following day, and sixteen pints of liquor amnii escaped. The head of the foetus being greatly distended with fluid, it would not pass till perforated. Profuse haemorrhage followed the expulsion of the child and placenta, and she died three days after, from inflammation of the muscular coat of the uterus.

(CASE 117.) In 1834, I was called by Mr. Newson, to a woman in Warwick-street, who had been in labour nearly sixty hours, and to whom repeated doses of ergot of rye had been given. It was the first child. The head had not entered the brim, and the practitioner had not discovered that it was distended with fluid. After perforation and the escape of the fluid, the extraction was easy. Inflammation of the uterus, however, took place, which proved fatal in a few days.

(CASE 118.) On the 14th of July, 1829, Mr. Prout called me to see Mrs. Keene, æt. thirty-one, residing at No. 6, Draper's-place, Euston-square. She had been long in labour with her first child, and there was some doubt about the nature of the presentation. After the escape of an immense quantity of liquor amnii, and the complete dilatation of the os uteri, the presenting part remained entirely above the brim of the pelvis. It was not till I introduced the hand into the uterus to deliver by turning, that we knew with certainty that the head presented, and the foetus was hydrocephalic. I withdrew the hand on ascertaining the fact, and immediately opened the head, when several pints of a bloody fluid gushed out. It was easily extracted, but the delivery was followed by violent shivering, and the greatest exhaustion. She rallied, however, and passed a quiet night. On the following, and two or three subsequent days, the shivering fits returned at irregular periods, sometimes in a slight form, at others, in that of a severe rigor, followed by a flush of heat, and partial or general

perspiration. During this time, the effects consequent to parturition proceeded as usual. The uterus slightly painful on pressure : lochia natural, bowels open : pulse one hundred and thirty-three to one hundred and forty, extremely feeble. No complaint of uneasiness, with the exception of a troublesome cough and hoarseness, with which she has been afflicted during the latter months of pregnancy. On the fourth day from delivery, the secretion of milk appeared for a short period, and afterwards receded. From this day to the 10th, the following were the symptoms : pulse rapid : skin universally of a dusky yellow colour, and the heat of surface increased : respiration hurried : thirst, tongue dry, but not furred : great protraction of strength, sallow and haggard countenance : restless and sleepless nights, mental faculties undisturbed. The uterus had gradually subsided, and no pressure, however great, either on it or on the parts in its vicinity, caused pain, except in the right iliac region, where some uneasiness was felt, the flow of lochia natural : bowels regular. At this period, the hacking cough which had so troubled her, became more frequent, and it was with difficulty she expectorated the ropy mucus which followed it, and which in the day amounted to about an ounce. From the 11th day the respiration became more short and hurried : the pulse more rapid : occasional flushes of heat : thirst : extreme debility : diarrhoea. Pressure over the whole abdomen : gave no uneasiness, nor was pain felt in any part of the chest, though auscultation plainly indicated the existence of disease, particularly on the right side. The patient made no complaint but of weakness and the cough. On the 12th the dyspnoea increased, and she sank exhausted in the evening. Mr. John Prout, who had carefully observed the progress of the symptoms from the period of delivery, was present with me when I examined the body. The uterus was of the size it usually is about the second week after delivery, and ex-

hibited externally no vestige of disease. On laying it open, its internal surface, as well as its muscular tissue, appeared also healthy, and the veins being traced, the right spermatic alone was found greatly enlarged and indurated. The uterus being removed from the body for more minute examination, an incision was made into the right superior angle, to which the placenta had been attached, and here its veins were discovered to be empty and their internal surface of a scarlet colour. On tracing them towards the trunk of the right spermatic vein, they were found to contain a sanguous purulent fluid, and were contracted in their diameters, and coated with false membranes. The veins of the right ovary and Fallopian tubes were all plugged up with firm coagula. The spermatic itself was lined throughout its whole extent with dense membranes of a reddish or of an ash-grey colour. Its coats, independent of these membranes, were of extraordinary thickness and firmness, and more like those of a large artery than of a vein. Its whole cavity was contracted ; in some parts occupied by a dark-coloured fluid, in others quite obliterated by adhesions, formed between the surfaces of the membranous layers deposited within it. At the termination of the spermatic on the vena cava, its orifice was scarcely large enough to admit a crow-quill ; traces of inflammation extended beyond this orifice, the vena cava being partially lined from two to three inches above it, with an adventitious membrane strongly adherent to its coats, which were at this part double their natural thickness. In its passage upwards, the inflammation had extended a short distance into the right emulgent vein, which near its orifice was coated with a pellicle of lymph. On opening the thorax, a stream of air escaped from the right side ; the lungs were collapsed, and upwards of two pints and a half of a red coloured serum were found in the sac of the pleura. The right inferior lobe was coated with lymph, and a portion of the pleura on the anterior surface was

destroyed, and a black gangrenous slough exposed in the substance of the lung. The pulmonary texture around was condensed, and of a deep violet or livid colour. The left inferior lobe was also partially coated with a thin layer of lymph, and the pleura at one point on the anterior surface was elevated, as if by a small hard globular body beneath it. When this was laid open, it appeared to consist of a thick yellowish-coloured cyst or capsule, containing a soft black matter like a gangrenous eschar. The substance of the lungs around was unusually dense, and of a dark livid colour.

(CASE 119.) A woman near the full period, residing at No. 9, Castle-street, St. Martin's-lane, was seized with slight labour pains on Saturday, June 18th, 1842. The liquor amnii soon after escaped. The pains continued during the 19th and 20th, at long, irregular intervals, and had little effect on the os uteri. Early on the morning of Tuesday, the 21st, they were stronger, and more frequent, and the midwife thought the labour would soon be finished. Suddenly a violent pain like spasm was experienced in the epigastric region, and soon after sickness, faintness, hurried breathing, and coldness of the extremities took place. Mr. Tucker was called to her about two hours after the occurrence of these symptoms, and found the placenta filling the os uteri, which was considerably dilated, and some hemorrhage going on. I saw her not long after, and thought she would probably die before the delivery could be completed. The hand passed readily into the uterus, and there being no pain, came in contact with what seemed, at first, the bodies of two children. It was passed on to the fundus, where there was a foot felt. I grasped this, and without the slightest exertion brought it down, and extracted the trunk and extremities of the child, but the head would not follow. I perforated the back part, when there escaped a very large quantity of fluid, and it was not till this began to flow, that I properly understood the cause of the diffi-

culty. With the crotchet passed into the opening, the head was easily drawn through the pelvis, and the placenta being loose was soon removed. Little hemorrhage took place, and for twenty-four hours the symptoms were so favourable, that it appeared she might recover. The sickness, however, never subsided, and she died suddenly forty-eight hours after being delivered. I examined the body the following day with Mr. Tucker, and we found all the coats of the uterus torn from the fundus to the orifice on the anterior part. There were about  $\frac{5}{6}$  ij. of blood in the peritoneum. The bones of the head were at least twice the usual size, the ossification particularly of the parietal bones having kept pace with the distension of the head from the fluid.

(CASE 120.) Mrs. G——, aet. thirty, No. 96, Drummond-street. Being at the full period of pregnancy, the liquor amnii began to escape at six P. M., 22nd June, 1842. Labour pains commenced at one A. M., of the 23rd, and Mr. Kennedy, of Tavistock-square, saw her at three A. M. The pains were feeble till eleven, and then for several hours after, they became more active and frequent. At three P. M. a small loop of the funis along with the head was felt at the brim of the pelvis. The pains gradually ceased after three, and she complained of cramps about the stomach. At six there was no dangerous symptom, but at eight violent pain was felt at the fundus uteri. At ten P. M. I first saw her with Mr. Kennedy; she was then sitting up in bed supported by pillows, the breathing hurried, and pulse feeble, sickness and vomiting. She complained of excruciating pain in the upper part of the uterus, which she could not bear to be touched, and which felt remarkably hard and irregular. Slight hemorrhage from the uterus; the funis still felt, but the presenting part had receded beyond the reach of the finger. I passed the hand into the uterus and felt the placenta adhering to the posterior wall, but could feel no part of the child. So violent was the

pain produced by the hand in the uterus, that I withdrew it without making any attempt to pass it through the opening in the uterus to extract the child. A large opiate was given, and she fell asleep for a short time. Feeling anxious that she should not die undelivered, we resolved to make an attempt to extract the child. I again passed the hand into the uterus, carried it forward through a great rent in the fundus, when it came immediately into contact with one of the feet, which I seized and brought back into the uterus. I had little difficulty in extracting the trunk and extremities of the child, but the head would not follow till opened behind the ear, and then several pints of fluid escaped. Abdominal inflammation followed, the acute symptoms of which yielded to treatment; but fifteen days after delivery, feculent matter began to pass by the vagina, and the whole continued to escape through the vagina for thirteen days after, when she died. The omentum and all the parts around the uterus were glued together. The lower part of the ileum adhered firmly to the fundus uteri. On separating the ileum, a great irregular opening was seen in the uterus, the edges of which were in a black sloughing state. The ileum was perforated in the part corresponding with the rent in the uterus, and through this opening the feculent matter had passed from the ileum through the cavity of the uterus into the vagina. Had the cause of the difficulty been ascertained sufficiently early in these five fatal cases of congenital hydrocephalus, and the operation of craniotomy been performed, it is impossible to doubt that some, if not all of them, would have ended favourably.

In thirty-eight of the cases in this Report, the labour continued from forty to seventy hours. In the cases of spontaneous rupture of the uterus and convulsions only was the delivery effected before the labour had lasted upwards of thirty hours. In a very large proportion of the cases the difficulty arose from distortion, or a con-

tracted state of the pelvis. Rupture of the uterus took place in three before perforation, and the inflammation and sloughing of the uterus, vagina, and bladder, which proved fatal to eight others, were chiefly or solely produced by the long-continued violent pressure on the soft parts by the head of the child before it was opened and extracted. In those who recovered with vesico-vaginal fistulæ, or contractions of the vagina from cicatrices, the unfortunate occurrences arose from craniotomy being too long delayed. After examining all the details of these cases, I feel satisfied that in none was the interference premature, and that in several, had the delivery been sooner effected, the fatal consequences which ensued would have been wholly prevented.

### THIRD REPORT.

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INDUCTION OF PREMATURE LABOUR IN CASES OF DISTORTION OF THE PELVIS—CANCER OF THE GRAVID UTERUS—UTERINE AND OVARIAN CYSTS AND TUMOURS—ORGANIC AND NERVOUS DISEASES OF THE HEART—DROPSY OF THE AMNION—OBSTINATE VOMITING—HEMORRHAGE FROM THE BOWELS—AND CHOREA DURING PREGNANCY.

(CASE 121.) At eight p. m., 16th April, 1831, I saw a patient with Mr. H. at No. 4, Brewer-street, who had been in labour with her fourth child the greater part of the day. The os uteri was widely dilated, but the membranes were unruptured, and the presenting part was beyond the reach of the finger. At ten p. m. I ruptured the membranes, and ascertained that the presentation was natural. The pains were strong and regular, and continued to return at short intervals till three o'clock on the following morning, when they began gradually to diminish in strength and frequency. At six a. m. the pains had wholly gone off, and the head was firmly impacted in the brim of the pelvis, and much swollen. The pulse was frequent and feeble, and all the usual symptoms of exhaustion were present. At seven a. m. Dr. H. Davies saw the patient, and agreed with us in thinking that immediate delivery by perforation was necessary. After opening the head, I found little difficulty in extracting it with the crotchet.

No bad symptom followed. I afterwards learned that this woman had been delivered of her first child by the same means. At the end of the seventh month of her second pregnancy, labour came on spontaneously, and the child was born alive without artificial assistance, and has been reared. Premature labour again came on spontaneously at the commencement of the eighth month of her third pregnancy. The nates presented, and the child was also extracted alive. Dr. H. Davies induced premature labour at the seventh and a half month of her fifth pregnancy, and the child was born alive, but died soon after in convulsions. Occurrences similar to those observed in the preceding and following cases must originally have suggested the idea of bringing on premature labour artificially in cases of distorted pelvis, and probably led, in 1756, to that consultation of the most eminent practitioners in London, at which the practice was approved of, and soon after successfully carried into effect by Dr. Macaulay.

(CASE 122.) On the 20th May, 1828, a woman twenty-nine years of age, with slight distortion of the pelvis, was admitted into the British Lying-in Hospital to have premature labour induced. Dr. H. Davies detached the membranes from the lower part of the uterus without rupturing them. Labour came on eight days after, and the nates presented. I extracted the trunk and extremities without much difficulty, but the head could not be drawn through the brim of the pelvis without the employment of much force for a considerable period, during which time the pulsations in the cord gradually ceased, and the child was born dead. It was evident that the forceps could not have been used with advantage in this case, and that had the presentation been natural the child would have been exposed to much less risk. This patient had been six times pregnant, and had gone to the full period twice, when it was necessary to perforate. Labour came on spontaneously at the seventh and half month of her third pregnancy,

after an accident, and the child was born alive, and has been reared. Dr. H. Davies has induced premature labour three times since, at the seventh and half month of pregnancy in this patient ; but although the children have all been born alive, none of them have long survived.

(CASE 123.) In the autumn of 1829, I saw a lady under thirty years of age, who had been forty-eight hours in labour with her first child under the care of Mr. Tucker. The os uteri was not then fully dilated, and the vagina was swollen and tender. The head of the child presented, and it was strongly compressed in the brim of the pelvis, through which the greater part of it had not passed. The labour pains were becoming more and more feeble, and had no effect in advancing the head. The pulse was rapid and the strength much exhausted. As the forceps could not be applied with safety, and immediate delivery was required, I opened the head, but the bones and integuments were much lacerated before the delivery could be completed with the crotchet. No unfavourable symptom followed. In 1831, the same patient being in the seventh and half month of her second pregnancy, I resolved to induce premature labour. For this purpose, I detached the membranes from the cervix of the uterus with a large bougie, the os uteri being too high up to be reached with the finger, and the separation of the membranes effected by it. A week elapsed, but no labour pains came on. I employed the bougie a second time still more freely, but no signs of labour followed. Dr. Merriman then saw the patient, and recommended puncturing the membranes with a slender silver catheter much bent. She was placed upon the sofa, on the left side, with the knees drawn up to the abdomen and separated with a pillow. The exact situation of the os uteri was then ascertained with the forefinger of my right hand. Along this finger, the fore and middle fingers of my left hand were then passed up to the

posterior lip of the os uteri, and in the groove formed between these fingers, the right finger having been withdrawn, the point of the catheter was pushed gently forward into the orifice of the uterus, and it passed upward about three inches towards the fundus uteri, before I was sensible of any resistance from the membranes. The liquor amnii immediately began to flow through the catheter, when the membranes were punctured, and labour pains followed in a few hours. The labour was very tedious, but the child was at last expelled alive, and is now, in 1842, a fine healthy boy.

(CASE 124.) In 1833, the same patient being at the end of the seventh month of her third pregnancy, another medical practitioner was consulted, who, after three unsuccessful attempts, succeeded in bringing on labour. The liquor amnii did not begin to escape until a week after the last effort. The presentation was preternatural, and the child was still-born.

(CASE 125.) On the 28th Dec. 1837, the same patient being near the end of the eighth month of her fourth pregnancy, I punctured the membranes without difficulty, with a large probe-pointed stiletted catheter, which I have now successfully employed in all cases of this description since 1836. The liquor amnii began to escape immediately after the stilette had entered the membranes, and continued to flow slowly during the whole of the 29th. Neither on this, nor on any other of the former occasions, could the presentation be ascertained when the membranes were perforated. Labour pains became strong and regular on the afternoon of the 30th, and the head presented. At ten p. m. the head was expelled, after remaining four hours strongly compressed in the brim of the pelvis. On clearing the brim, it was born in a few minutes; the respiration was established with great difficulty, but the child lived and enjoyed good health for a month, when it was exposed to cold, and was suddenly destroyed by inflammation of the lungs. Dr. Child was present when the membranes

were perforated. This patient had not suffered from rickets in early life, and there was no deformity in any other part of the body.

(CASE 126.) About the end of January, 1839, this patient again became pregnant, and the membranes were perforated on the 21st September. On the 23rd, as little liquor amnii had escaped, and there was no symptom of labour, the operation was repeated, but little fluid followed, and the labour did not come on till the 26th, at four A. M. The first stage was soon completed, but the head did not pass through the brim of the pelvis till three in the afternoon, when it was greatly swollen, and compressed on the sides. It breathed irregularly for an hour after birth, and then died. Had the labour been brought on a fortnight earlier, as I proposed, the probability is that the child would have been born without difficulty, and lived.

These cases are sufficient to prove that the practice of inducing premature labour at the seventh and half month of pregnancy, in slight distortion of the pelvis, is attended with little danger to the mother, and that it has been the means of preserving the lives of children, who must otherwise have been sacrificed. There are many other similar cases recorded by other writers in this country, which show that the strong prejudice against the induction of premature labour entertained by most continental authors is not well founded, and that the unfavourable judgment pronounced upon it by the French Academy, in 1827, is erroneous, and ought to be reversed.

In the cases which follow, the advantage of inducing premature labour was not less striking, although the degree of distortion was so great that a child even of seven months could not be born alive. The greater number of the best practical writers on midwifery in this country have considered the induction of premature labour applicable only to cases of slighter distortion, and have considered it improper in first pregnancies,

and before seven complete months of utero-gestation have elapsed. Little has been said by them respecting the safety and utility of the operation in cases of great distortion, to obviate the danger to the mother of fatal contusion or laceration of the uterus and vagina, which are always to be dreaded when much force is required after perforation to extract the head of the child.

"If the pelvis be so far reduced in its dimensions," observes Dr. Denman, "as not to allow the head of a child of such a size as to give hope of its living to pass through it, the operation cannot be attended with success. It is in those cases only in which there is a reduction of the dimensions of the pelvis to a certain degree, and not beyond that degree, that this operation ought to be proposed or can succeed." \*

As the primary object is to preserve the life of the child, Dr. Merriman thinks the operation should never be performed till seven complete months of utero-gestation have elapsed.

As early as 1769, it was proposed by Dr. Cooper to induce abortion in cases of extreme distortion of the pelvis. "Before I conclude," he remarks, in his History of a Fatal Case of Cæsarean Section, "allow me to propose the following question, viz.: "In such cases where it is certainly known that a mature child cannot possibly be delivered in the ordinary way alive, would it not be consistent with reason and conscience, for the preservation of the mother, as soon as it conveniently can be done, by artificial means to attempt to produce an abortion?"

(CASE 127.) On Tuesday, 9th Jan. 1838, Mr. Robertson, of Jermyn-street, requested me to see a woman whose pelvis and extremities were greatly distorted by rickets, and who was in the seventh month of her first pregnancy. From an examination of the pelvis, we thought the short diameter of the brim was considerably

\* Derman, Midwifery, vol. ii. p. 217.

under three inches, and that a child at the full period could not pass through it without having the volume reduced by craniotomy, and that the operation would be attended with difficulty and danger. We resolved, in consequence, to induce premature labour, though it was the first pregnancy, and though a rule had been laid down by the most judicious writers, that the practice should never be adopted till experience had decidedly proved that the mother was incapable of bearing a full-grown child alive. The os uteri was situated high up and directed backward, but I experienced no difficulty in introducing the stiletted catheter, and perforating the membranes. The liquor amnii began to escape immediately after, and continued to flow for three days ; and labour pains then came on. For forty-eight hours they were feeble and irregular. Mr. Robertson then found the os uteri considerably dilated, and a foot of the child protruding through it. He extracted the trunk and extremities without difficulty ; but he could not succeed in drawing the head through the brim into the cavity of the pelvis. I passed the point of the perforator up to the back part of the head without difficulty, and having made a large opening through the integuments and skull, the brain began to escape. The point of the crotchet was then introduced into the opening, and fixed upon the base : and by drawing downwards and backwards with the crotchet, and at the same time pulling upon the body of the child, the head soon passed through the pelvis completely flattened on the sides. The patient recovered without a bad symptom. I had never before induced premature labour in a first pregnancy.

(CASE 128.) On the 17th May, 1839, when the same patient had completed the seventh month of her second pregnancy, I punctured the membranes. The liquor amnii began immediately to escape, and continued to flow the whole of the following day ; and in the evening violent labour pains came on. The nates pre-

sented, and Mr. Robertson had no difficulty in extracting the child without perforation of the head. On the 19th, the usual symptoms of ruptured uterus soon appeared, and she died on the 22nd. On the 24th, I examined the body with Mr. Robertson, and we found a large rent in the cervix uteri. The pelvis is now at St. George's Hospital, and the following are its dimensions :—The distance from the base of the sacrum to the symphysis pubis measures two inches and one line. The transverse diameter of the brim is five inches and three-quarters. At the outlet a line drawn between the tuberosities of the ischia measures four inches and a half, and another line, from the extremity of the coccyx to the lower edge of the symphysis pubis, three inches and a half. Had premature labour been induced at the end of the fifth month instead of the seventh, it is very probable the unfortunate termination of this case would have been prevented.

(CASE 129.) On the 23rd January, 1842, Mr. Kell, of Bridge-street, Westminster, requested me to see, with him and Dr. Hingeston, a woman æt. twenty-eight, who was in the seventh month of her first pregnancy, and whose pelvis was greatly distorted by rickets. Some days before, Dr. Hingeston had passed a sound into the uterus and detached the membranes from the lower part, but labour did not take place. I found the os uteri high up, and situated close behind the symphysis pubis. No difficulty was experienced in perforating the membranes in the usual manner, and the liquor amnii afterwards began to escape, and continued to flow till the evening of the 26th, when strong labour pains commenced. At 6 a. m. of the 27th, the os uteri was considerably dilated, and the nates were felt presenting. As it was obvious the breech would never pass through the brim, I brought down the lower extremities with the blunt end of the crotchet, and extracted the trunk without difficulty ; but I was obliged also to bring down the arms with the blunt hook. I

afterwards endeavoured to pass up the perforator to the back part of the head, and open it, but could not succeed in getting the point of the instrument beyond the upper cervical vertebræ. Being afraid of separating these, and detaching the head from the trunk, I gave up the attempt to perforate the back part of the head, and tried to draw the head through the brim of the pelvis with the crotchet, by fixing the point of the instrument over the bones of the face and forehead. After much exertion, continued for nearly two hours, the head was at last extracted, when completely torn to pieces. I believe it would have been impossible in this case to perforate the skull through the roof of the mouth, as has sometimes been done where similar difficulties have presented to perforating the back part of the head. The placenta was soon expelled, and the patient had a perfect and rapid recovery. It is impossible to doubt that the result of this case would have been widely different, had the patient been allowed to go on without interference till the end of the ninth month.

(CASE 130.) On the 5th December, 1829, the late Mr. Baker, surgeon to the St. James's Parochial Infirmary, requested me to see Mrs. Ryan, æt. twenty-one, who had been in labour thirty-six hours. It was her first child. The head presented, but no part of it had entered the brain of the pelvis. The orifice of the uterus was about half dilated, and its margin was thin and soft. We estimated the short diameter of the brim of the pelvis at less than three inches, and the distance between the tuberosities of the ischia at two and a half. Both upper and lower extremities of this patient were bent from rickets. Four hours elapsed, after the head was perforated, before we succeeded in extracting it with the crotchet, and not till the bones of the cranium were all torn to pieces. A violent attack of uterine inflammation followed, which had nearly proved fatal.

(CASE 131.) On the 30th December, 1830, when this patient was in the eighth month of her second

pregnancy, I induced premature labour by puncturing the membranes. The labour was allowed to continue till it was certain the head of the child could not enter the brim of the pelvis. The head was then perforated, and easily extracted with the crotchet. The difference between this and the former operation was very striking.

(CASE 132.) On the 26th April, 1832, when Mrs. R. was in the seventh and half month of her third pregnancy, I induced labour. The feet of the child presented, and the delivery was accomplished without perforation. Child dead.

(CASE 133.) On the 12th July, 1833, I induced labour in this patient at the end of the seventh month. The inferior extremities again presented, and the child was still-born.

(CASE 134.) Mrs. R. again became pregnant, and I brought on labour on 13th February, 1834, exactly seven months after the last appearance of the catamenia. The presentation was natural, and the child was born alive after a tedious labour. It lived sixteen days, and then died in convulsions. The child was extremely small.

(CASE 135.) Mrs. R. became pregnant a sixth time, and went into the British Lying-in Hospital, at the seventh and half month, where I perforated the membranes on the 27th December, 1834. The feet presented, and great force was required to extract the head. The recovery was less rapid than after her former deliveries. Mrs. Ryan became pregnant a seventh time, and determined she would not again submit to have premature labour induced, which afterwards fortunately proved to be a wise resolution, for the placenta adhered to the neck of the uterus.

(CASE 136.) On the 23rd August, 1836, I again induced labour in this patient at the seventh and half month. Labour pains came on twenty-four hours after the membranes were perforated, and the lower extremities of the child presented; and the child was extracted

dead, with the head bruised and flattened on the sides. Mr. Gaskoin and Mr. Stutter were present.

(CASE 137.) On the 30th August, 1837, Mrs. R. being at the end of the seventh month of pregnancy, I perforated the membranes with great ease, and labour followed the same evening. The feet presented, and the trunk and head of the child were much contused before Mr. W. Highmore, who had the charge of the case on this occasion, could extract the child. The labour pains came on immediately after the membranes were punctured.

(CASE 138.) Mrs. R. again became pregnant about the end of December, 1837. "On the 17th January, the catamenia not having appeared, she began taking secale cornutum for the purpose of producing the expulsion of the ovum." She began by taking gr. xii. four times a day in infusion. This having produced no effect in six days, the dose was increased to gr. xv. four times a day. In six days more this was increased to a scruple four times a day. In six days more this was increased to gr. xxv. without any effect. The dose was then increased to 5ss. four times a day. Mrs. R. then left off the ergot for one week; when she again resumed it, she took 5*i.* doses four times a day for four days, and this having produced no effect whatever, she left off taking it altogether. Mrs. R. therefore took seven ounces of the ergot of rye, which was all procured at Butler's, Covent Garden. Labour not having followed, I perforated the membranes on the 25th July, 1838. The pains soon after came on, and the labour was completed in thirty-seven hours. The child was dead, and its head and face were of a dark colour, and much swollen. Dr. Zettwah and Mr. E. H. Mills, St. George's Hospital, were present.

(CASE 139.) Mrs. R. menstruated on the 3rd November, 1839, and a few days after had the usual symptoms of pregnancy. With Mr. Braybooke, on the 17th May, 1840, I induced premature labour, and in

doing this reached the posterior lip of the os uteri much more readily with the fore and middle fingers of the left-hand than with the fore-finger of the right to pass the catheter into the uterus. Labour came on in twenty-four hours, and a dead child of six months was easily expelled, and she recovered as usual.

(CASE 140.) On the 16th January, 1842, with Dr. John Hunter and Mr. Daniell, I again brought on labour in this patient, when she had scarcely reached the end of the seventh month. On this occasion I tried the effect of detaching the membranes from the lower part of the uterus, but it was unsuccessful. On the 19th, I opened the membranes, and the liquor amnii immediately began to escape freely. Labour came on after a dose of castor oil on the 23rd, and the funis came down before the head, and had ceased to pulsate some time before the child was born. Is now quite well.

(CASE 141.) On the 3rd July, 1828, I was requested by Mrs. Phillips to deliver Mrs. Rodwell, a little deformed woman, twenty-six years of age, residing at No. 21, Princes-street, Drury-lane, who had been in labour with her first child upwards of twenty hours. The umbilical cord was hanging out of the external parts, and did not pulsate. The right foot was in the vagina, and the head over the brim of the pelvis, and so firmly fixed in that situation, that by no force which I could exert upon the left leg could the nates be brought into the pelvis. The pains were feeble, and the orifice of the uterus but partially dilated. The outlet, cavity, and brim of the pelvis were all very much distorted. Finding it to be impossible to bring down the breech of the child, or press back the head, I performed the operation of craniotomy, and it was not till the greater portion of the bones of the cranium had been removed with the crotchet, that I succeeded in dragging down the trunk and superior extremities of the child. When this was done, the crotchet was passed up, and its point

fixed on the base of the skull, and the head drawn into the cavity and through the outlet of the pelvis. Dr. Stephen Hall was present at the delivery, which lasted from ten at night till two o'clock in the morning. The tuberosities of the ischia were not more than an inch and a half asunder, and the distance from the promontory of the sacrum to the symphysis pubis was under three inches. This patient had a severe attack of uterine inflammation after delivery, which required copious venesection. In ten days she had nearly recovered her usual state of health.

(CASE 142.) In 1829, about fifteen months after this, Mrs. Rodwell being in the seven and half month of her second pregnancy, I brought on labour by detaching the membranes with a bougie from the lower part of the uterus. Labour came on sixty hours after this separation had been made. The head of the child presented, but it could not be pressed through the brim of the pelvis, though she was left forty-eight hours in labour. The head was easily extracted with the crotchet after perforation, and she speedily recovered.

(CASE 143.) In 1830, the same patient had premature labour induced a second time at the seven and half month of her third pregnancy. A superior extremity presented, and the operation of turning was performed with great difficulty. After the child had been turned, the head could not be brought through the brim of the pelvis till perforated in the back part, and strong traction employed with the crotchet.

(CASE 144.) I induced premature labour a third time, in 1831, when Mrs. Rodwell was at the seven and half month of her next pregnancy. The nates presented, and after the trunk and extremities of the child had been extracted, the head could not be drawn through the brim of the pelvis, without the operation of craniotomy. This was performed with the perforator and crotchet, as in her first labour.

(CASE 145.) On the 5th October, 1832, Mrs. Rod-

well being in the seven and half month of her fifth pregnancy, I passed up an elastic catheter into the uterus, and detached the membranes all round from the cervix. No pains having been felt three days after, I separated the membranes still more extensively. This was followed by a considerable hemorrhage from the uterus for several hours, but no labour pains. The following day she appeared much exhausted, but there were no labour pains. I then perforated the membranes, and the liquor amnii began to escape, and labour pains came on soon after. In the evening the pains were strong, the os uteri was widely dilated, and the nates presented. The labour was allowed to continue for several hours till it became certain the nates would not pass without assistance, and they were then extracted, and also the trunk and superior extremities. The head, however, would not follow. I pulled strongly upon the neck. The perforator and crotchet were employed, and the delivery was at last effected, but death took place five days after from uterine phlebitis.

(CASE 146.) On the 17th January, 1830, I was called by the late Mrs. Dobson to deliver Mrs. Jarvis, æt. 30, residing at No. 6, Gough-street, Clerkenwell, who had been forty-eight hours in labour. The pelvis was greatly distorted, the whole head of the child above the brim and the os uteri not more than half dilated. The pains had nearly ceased, and she was quite exhausted. The perforator was conducted to the head, along the inside of the fore and middle fingers of the left-hand, and with these the os uteri was protected from injury, while the opening was being made. The crotchet was then introduced through the opening within the head, and the brain broken down and a quantity of it discharged. I found it impossible to lay hold of any part of the head with the craniotomy forceps, from the distorted state of the pelvis and undilated state of the os uteri. More than three hours elapsed before I succeeded in dragging the head with

the crotchet into the cavity of the pelvis, and not until the point of the instrument was passed up and fixed on the outside of the head behind the jaw. The bones of the upper part of the head were all torn to pieces, and the fingers of my left-hand much injured, before the delivery was effected. The placenta came away in half an hour, and the patient recovered as if the labour had been natural. Mrs. Jarvis was a native of Manchester, and when young had spent several years in one of the cotton manufactories of that town. She married at twenty, and had given birth to three living children at the full period, without assistance. During the fourth pregnancy, she suffered much from pains about the sacrum and ilia, and became unable to walk.

(CASE 147.) On the 11th July, 1832, I was requested by Mr. John Prout, surgeon to the British Lying-in Hospital, to see Mrs. Jarvis, who had again become pregnant, and was in labour at the full period. Labour commenced at two o'clock in the morning of the 11th July, when the liquor amnii was discharged. In the evening Mr. Prout saw her for Dr. Golding, and from the distorted state of the pelvis, he found it impossible to reach the os uteri with the finger, and thought delivery could never be accomplished but by the Cæsarean operation. At eleven o'clock at night I saw her with Mr. Prout, but the os uteri could not be touched with the finger, and the nature of the presentation could not be ascertained. The pains being weak and irregular, and there being no reason for immediate interference, we resolved to leave her without assistance during the night, hoping that the orifice of the uterus and presenting part of the child would come into a more favourable situation. At eight A. M. 12th July, we found that there had been strong pains during the night, but neither the orifice of the uterus nor presentation could be felt. In the course of the day Dr. Golding saw her with us, and it was then ascertained, that the orifice of the uterus was considerably dilated, and

that the head of the child presented. The head was immediately perforated, and the brain destroyed. Fourteen hours after, when the bones of the head had been a little squeezed into the brim of the pelvis, Dr. Golding passed up the crotchet between the uterus and head, and fixing its point in one of the orbits, succeeded in dragging the head through the pelvis. She recovered as favourably as she had done in 1830. She did not suffer from pains about the pelvis after this time, and was able to walk about. There was no distortion of the lower extremities or of any other part of the body.

(CASE 148.) In the month of June, 1833, when the same patient was near the end of the fifth month of pregnancy, I attempted to induce abortion by perforating the membranes with a slender silver catheter. The first attempt was unsuccessful from the firmness of the membranes, but the second trial, made a week after, was speedily followed by the escape of the liquor amnii, and in eight days by the expulsion of the embryo without artificial assistance.

(CASE 149.) On the 12th of February, 1835, I induced premature labour in the same patient at the commencement of the seventh month of pregnancy. Thirty-two ounces of liquor amnii flowed through the silver catheter with which I punctured the membranes. The foetus was expelled without artificial assistance, but its head was squeezed so as to be quite flat on the sides. Mr. Williams, of Calthorpe Street, and Mr. Rumsey, of Beaconsfield, were present.

I may here remark, that in no case of distortion, however great, can it be necessary to induce premature labour before the end of the fifth month of pregnancy, when the foetus is so small and soft that it can be easily extracted. The length of the cervix uteri before this period must render it both dangerous and difficult.

(CASE 150.) On the 19th of January, 1836, when the

same patient was at the end of the sixth month of pregnancy, I endeavoured to induce premature labour by puncturing the membranes. The os uteri was, however, so high up, that I could not reach it with the point of the finger, or introduce the catheter so as to perforate the membranes. On the 12th of February, 1836, I renewed the attempt, but again failed, and partly in consequence of the forefinger of my left-hand being still nearly deprived of sensation and the power of motion, from a dissection wound, followed by deep-seated inflammation of the joints. I resolved to try the effects of ergot of rye, and gave five grains every four hours for several days. On the 18th, Mrs. Jarvis informed me that she had felt pains in the back, and down the thighs, for about ten minutes after taking each powder of ergot, but that no other effect had been produced by them. The ergot was continued every three hours during the day till the 23rd, when pains like those of labour came on, but they gradually ceased, and the ergot was discontinued in consequence of the sickness and vomiting it produced. On the 28th, the ergot was again tried, but as it produced nothing but violent sickness, she refused to continue its use any longer. On the 14th of March, another attempt was made to perforate the membranes with the instrument invented by Mr. Holmes, for the induction of premature labour; but this was also unsuccessful, in consequence of the instrument not being sufficiently curved. On Thursday, the 24th of March, I passed up into the uterus a stiletted silver catheter, with a probe point, and much bent, which had been made for the purpose, and with this the membranes were easily perforated. The liquor amnii immediately after began to escape, and labour pains commenced the following day. Friday, 25th, the pains continued; feeble and irregular during the Saturday, Sunday, and Monday, and on the Tuesday they became strong and regular. At six o'clock in the morning of Wednesday, the 30th, the os uteri was thick

and unyielding, above the brim of the pelvis, and very little dilated. The presentation could not be ascertained. The pains continued strong and regular. Mr. Simpson, of Grays Inn Lane, took  $\frac{5}{8}$  viii. of blood from the arm, and gave forty drops of laudanum. At this time, I feared that it would be necessary to have recourse to the Cæsarean operation, to prevent her from dying undelivered. At 4 p. m. the pains continued, the os uteri was much more dilated, and I ascertained that the nates presented. I immediately resolved to attempt delivery, by passing the crotchet through the anus, completely within the pelvis of the foetus, fixing it upon the bones, and extracting. This succeeded, and the pelvis and lower extremities were delivered without much difficulty, and a strong tape was passed around the body of the child. The abdominal and thoracic viscera were then drawn out with the crotchet, and the upper extremities brought down. The fore and middle fingers of the left-hand were then slid along the back of the child, and pressed forward till they touched the occiput. The perforator was then passed up to the occiput, and a free opening made in it. The crotchet was next passed up, and its point forced through the opening, fixed on the base of the skull, and strong traction made for some time. At last I succeeded in extracting the head, with the bones all crushed together. After this severe and tedious operation, she was left in a very exhausted state, and died the following day, with vomiting and other symptoms of ruptured uterus. On examining the body after death, we found the muscular coat of the anterior part of the neck of the uterus lacerated. The pelvis was removed, and is now in the Museum of St. George's Hospital. Its brim, cavity, and outlet are all much distorted. The last lumbar vertebra occupies the usual situation of the base of the sacrum, which is pressed down into the cavity; the bones of the pubis have been forced together so as nearly to touch each other, and give to the brim of the pelvis a

cordiform shape. On the left side, a line drawn from the middle of the last lumbar vertebra to the ilium behind the acetabulum, measures one inch and a half. On the right side, a corresponding line measures only an inch and a quarter. From the middle of the last lumbar vertebra, to the bones of the pubis, the distance is an inch and three quarters. At the outlet, the tuberosities of the ischia are only three or four lines asunder, and the arch of the pubis does not exist. The lower extremity of the sacrum and coccyx pass horizontally forward, so that the apex of the latter bone is only two inches and three lines from the point where the tuberosities of the ischia nearly meet. This is the only case of distortion from malacosteon that I have met with in practice, and the softening was entirely confined to the bones of the pelvis. In reflecting on this case, I regret extremely that I placed the slightest dependence on the ergot of rye, and that I had not taken means to ensure the perforation of the membranes at an earlier period, which would have prevented all the evil consequences that followed.

(CASE 151.) On the 30th of August, 1836, I was requested by Mr. Wise, of Wardour Street, to deliver a woman twenty-four years of age, residing in Princes Court, Newport Market, the bones of whose pelvis and lower extremities were much distorted with rickets. She was at the full period of her first pregnancy, and had been in labour many hours. The cord was hanging out of the external parts without pulsation. The head was entirely above the brim of the pelvis, and the os uteri was about half dilated, and its edge thin and soft. As the sacro-pubic diameter did not exceed two inches, and the outlet of the pelvis was also much contracted, I immediately perforated the head. The crotchet was then employed to extract the head, but after a time it was laid aside, in consequence of the bones being torn extensively, and the impossibility of fixing its point on any part of the inside of the skull, so as to obtain a

secure hold. With the craniotomy forceps I laid hold of one of the parietal bones and the integuments covering it, but in a short time these came away, leaving the greater part of the head still above the brim. The forceps was reapplied, but though I exerted my whole force in dragging down the head, it would not pass, and I began to fear that I should not succeed in completing the delivery. By introducing all the fingers of my left-hand into the vagina as far up as possible, and directing the fore-finger on the outside of the head, I was able to feel one of the eyes; I passed the point of the crotchet into this orbit, and getting the fore and middle fingers of the left hand on the inside of the skull, with this hold I soon drew the head into the cavity of the pelvis. The head would probably never have been extracted in this case with the crotchet, had not its point been carried up on the outside and fixed in the orbit.

(CASE 152.) On the 1st of October, 1837, the same operation was performed upon this patient when seven months pregnant, but the head would not pass till it was perforated, which was easily done. A second time premature labour was induced with the same results. The same patient became pregnant again, and was in labour at the full period on the 21st of May, 1840. I perforated and delivered with much less difficulty than in the first labour. The crotchet being carried up and fixed on the outside of the head as soon as the brain was removed and the cranial bones had collapsed. Recovered.

(CASE 153.) On the 16th of April, 1841, I induced premature labour in a patient of Dr. N. Grant's, 10, Paddington-street, who was in the seventh and half month. The pelvis was small, but not distorted. She had twice before been delivered artificially of still-born children, and on this occasion the child was also expelled dead. She had suffered from chorea after one of her confinements, and has since died from disease unconnected with the uterus.

In the following cases of pregnancy with malignant disease, and fibrous tumours of the uterus, ovarian cysts, organic and nervous affections of the heart, dropsy of the amnion, hemorrhage from the bowels, and obstinate vomiting, the induction of premature labour was, or might have been employed, with advantage.

(CASE 154.) On the 1st of May, 1840, Mr. Cross, of Leicester-square, requested me to see Mrs. Ayesbury, æt. forty-one, who had been twenty-four hours in labour. The os uteri was hard, irregular, and ulcerated, and so little dilated that the presentation could not be ascertained. The symptoms of malignant disease of the uterus had commenced two years before, and the pain and discharge became aggravated when conception took place. The labour pains continued strong and regular the whole afternoon and night of the 1st of May. At seven A. M. of the 2nd, the pains were violent and incessant, with restlessness and sickness at stomach. The os uteri continued precisely in the same condition, and the presenting part could not be felt. Twenty-five ounces of blood were drawn from the arm, and 3*j.* of laudanum administered. At eleven P. M., the pains still continuing violent, with severe rigors, rapid pulse, and incoherence, another effort was made to reach the presenting part, though the os uteri was still undilated. Having succeeded in touching the head, the perforator was passed up along the finger, the skull opened, and the brain destroyed. The propriety of making incisions into the diseased os uteri had been considered, before the head could be opened, but the idea was abandoned, after consulting an eminent surgeon. At six A. M., May 3rd, the labour pains having continued strong and regular during the night, the os uteri opened sufficiently to allow the crotchet to be introduced and the head extracted. The placenta soon followed the child, but she continued gradually to sink, and died on the 4th May. The body was examined by Mr. Cross,

and the neck of the uterus extensively lacerated, presented the appearance of an irregular dark-coloured, disorganised mass. The danger of dying undelivered, and the injury necessarily inflicted upon the uterus, by the extraction of the child, would have been both avoided or lessened in this case, by the induction of premature labour.

(CASE 155.) Several years ago, a woman with malignant disease of the os uteri, and who was three or four months pregnant, was admitted into St. George's Hospital. She afterwards went to Margate, but though labour came on at the end of the seventh month, the os uteri did not dilate sufficiently to allow the foetus to pass, and it was extracted with the vectis. Symptoms of ruptured uterus soon followed. Mr. Price examined the body after death, and sent the uterus to me. The whole orifice and neck of the organ was destroyed by cancerous ulceration, and the anterior part of the cervix was lacerated.

(CASE 156.) In April, 1840, I was requested by Dr. James Johnson to see a patient, who had a malignant fungoid disease of the os uteri. The catamenia had disappeared for several months, and she had morning sickness, and other symptoms, which made her believe that she was pregnant. In May, the abdomen had enlarged, and the sound of the pulsations of the foetal heart, and uterine arteries, were distinctly heard, and the movements of the foetus felt with the hand. The areolæ were broad and dark, and the glands around the nipples enlarged. I recommended premature labour to be induced, but she would not consent to the operation. Delivery, however, took place spontaneously on the 14th July, and a dead child of seven months was expelled without artificial assistance. The pain, discharge, and other symptoms of cancer, almost entirely disappeared for several months after her confinement, but they returned, and Mr. Rawbone, King's Road, Chelsea, informed me that she died on the 1st January, 1841.

On relating these cases to Dr. Merriman on the 7th May, he informed me that he had met with three of a similar nature. In one the labour pains were excruciating, and continued for a long time without producing any effect upon the os uteri, but at last it gave way suddenly, and the head passed through it. The child was born alive. The mother died six weeks after.

On returning home from attending a case of labour, Dr. Merriman was informed by his uncle, the late Dr. S. Merriman, that the patient had a scirrhus of the os uteri, that he thought she would never have another child, and would die from the disease. That, he said, was the result of his experience in other cases. She conceived again, however, and died soon after delivery. The child was born alive, and neither in this nor in the last case was any operation performed.

The history of Dr. Merriman's third case of labour, complicated with cancer uteri, is contained in the following letter :—

" My dear Doctor Lee,—The following case, which I did not recollect last night, will interest you ; I do not remember any one very similar.

" August 12th, 1824, I was desired by my excellent friend, Mr. Clifton, of Leicester-place, to visit Mrs. George, whose husband kept the Coach and Horses public-house in Compton-street, Soho. She told me that she had been long ill, and had consulted Dr. Bree, who thought her disease was ulcer of the womb, and treated her accordingly ; she said, however, she was quite sure of being pregnant, and not liking to continue a mode of treatment, which she imagined must be improper, had ceased to consult him.

" On making inquiry into her symptoms, it appeared that Dr. Bree was justified in taking the view he did of her complaint : they were, extreme pain in the back, constipation, emaciation, and especially extremely offensive discharges from the vagina. These symptoms had

occurred after a lying-in, two years before, and had continued ever since; indeed there was some reason to believe that they had shown themselves before the termination of that pregnancy. Upon this point, however, the evidence was not quite satisfactory.

" Having learnt thus much, I inquired what were her reasons for thinking herself pregnant; her reply was, that she distinctly felt the motions of the child. As no examination per vaginam had been instituted, I obtained permission to pass my finger, and was not a little surprised to find that the os uteri and part of the cervix were entirely destroyed by a species of *ulcus exedens*, yet that the body of the uterus was enlarged to the size it usually attains between the fifth and sixth month, and that it contained a living foetus; so that this was a case of pregnancy in a uterus deprived by disease of a large portion of its substance. Whether the os uteri had taken on disease before the pregnancy commenced, must remain uncertain; but at the time of my examination, which was made with as much care and exactness as was in my power, the whole of the os uteri, and a large portion of the cervix, were literally eaten away by ulceration.

" On conferring with Mr. Clifton, who accompanied me, on the treatment to be adopted, I expressed an opinion that the foetus could not be much longer retained, for the distension of the uterus was already beginning to intrench upon the cervix; and as the distension proceeded, the ulcerated cervix would be pressed upon, and must necessarily give way, and the foetus be expelled; accordingly, on the 31st August, the foetus and placenta passed into the world, almost without pain: the child, of about six months gestation, was born alive and lived a few hours. The poor woman, who now began to entertain hopes of recovery, was not at all benefited by the delivery, but continued to live in a state of great suffering, sometimes mitigated by nar-

cotics, till the month of February, when death gave her a happy release.

“ Believe me, dear Sir,

“ Yours with great truth,

“ SAMUEL MERRIMAN.

“ Brook Street, Grosvenor Square,  
May 8th, 1840.”

In Dr. F. Ramsbotham's first case the labour was premature, and the child was easily expelled. The woman died two weeks after. The second woman died undelivered.

Dr. Henry Davies has related to me a case of labour at the full period with cancer, in which the uterus was ruptured, and death speedily followed delivery.

In 1770, Dr. Denman saw a case of malignant fungoid tumour of the os uteri, with pregnancy, at the end of the ninth month. The operation of embryotomy was performed, but the patient died before the child could be extracted. He states that smaller tumours of the same character are not unfrequently met with in practice, and that little effect is produced by the labour pains for a long period, but that all at once the rigid os uteri yields and dilates speedily and unexpectedly, or perhaps, in some instances, is lacerated. In some cases also, he states that the excrescences are of so tender a structure that they are crushed by the passage of the head over them, and entirely destroyed.

If abortion does not take place where pregnancy exists, with cancer of the os uteri in an advanced stage, the membranes of the ovum should be perforated, and at the seventh and a half month if the disease is less extensive.

(CASE 157.) A woman, æt. thirty, in the fifth month of her first pregnancy, began to suffer from sickness, fever, and constant pain and distension of the abdomen. On examination, it was easily perceived that the gravid

uterus was pressed to the left side by a hard, painful, lobulated tumour on the right. This continued rapidly to enlarge, and to become more exquisitely painful, though leeches were applied in great numbers over the tumour, and calomel, antimony, opium, and cathartics, were administered internally. The painful distention of the abdomen soon became so great that it was necessary to obtain relief by inducing premature labour. This was easily done. For a short time after delivery the symptoms were less severe, but the fever, sickness, and painful distention soon returned and proved fatal. A fibrous tumour, in a state of inflammation and suppuration, was found attached by a large root to the right side of the body at the uterus. The peritoneum which covered it, adhered to the parietes of the abdomen, omentum, intestines, and liver. Numerous small fibrous tumours, the blood-vessels of which have been injected, were found imbedded in other parts of the parietes of the uterus. These were in a healthy state. I was called to this case by Mr. Walker, of Marylebone-street, and it occurred in the summer of 1840.

(CASE 158.) On the 6th December, 1840, Dr. Brown requested me to see a case of pregnancy complicated with an ovarian tumour. This tumour had appeared five years before conception took place, and had slowly enlarged. The patient was in the sixth month of her first gestation, and the abdomen was enormously distended, and a fluctuation was perceived on percussion. The difficulty of breathing was so urgent, that it was impossible for her to remain an instant in the horizontal position. We considered it necessary to induce premature labour, but the os uteri was so high up, and directed so much backwards, that great difficulty was experienced in passing the stiletted catheter into the uterus, to perforate the membranes. The anterior lip of the os uteri could only be reached with the tip of the finger. An instrument with a sharp point and a smaller curve than that employed could not have

been introduced in this case to evacuate the liquor amnii. On the 7th, labour-pains commenced. Venesection and opiates were employed to promote the dilatation of the os uteri. The nates presented, and on the 9th a dead foetus was expelled. The relief from the delivery was great, though the abdomen continued large, and the fluctuation distinct for several weeks. August, 10th, 1841. The ovarian tumour has been considerably reduced in size, since the repeated application of leeches, and the long continued use of the liquor potassæ. The general health is nearly in the same condition as before pregnancy.

(CASE 159.) Twelve years ago, with Dr. Merri-  
man, and Dr. John Prout, I examined the body  
of a woman, æt. thirty, who had died from malignant  
disease of the right ovary a few days after delivery.  
In the 4th month she began to suffer from a constant  
sense of uneasiness in the hypogastrium, and irritability  
of stomach. The countenance became sallow, and the  
constitutional powers greatly reduced. The abdomen  
not long after began rapidly to enlarge, and before the  
end of the seventh month it had attained the size it  
usually acquires at the full period. An enormous cyst,  
which contained a dark-coloured gelatinous fluid, was  
found on dissection adhering to the right ovary, and  
within this cyst were a number of others of different  
sizes and shades of colour, which, when cut open, pre-  
sented the true encephaloid or hæmatoid fungous char-  
acter.

(CASE 160.) On the 6th December, 1827, I saw a  
young woman near the full period of pregnancy, who  
had suffered for several years from an organic disease  
of the heart. The face was livid, the extremities cold,  
the pulse rapid and feeble, and the dyspnœa urgent.  
For three months she had suffered severely from palpi-  
tation of the heart, and frequent attacks of violent  
dyspnœa, threatening suffocation. The symptoms were  
relieved by V. S. to 3xii., putting the feet and legs in

warm water, and giving an antispasmodic draught. On the morning of the 7th, she felt much better, but at eight P. M. the difficulty of breathing returned, and she suddenly fell down and expired. The pericardium adhered throughout closely to the heart, and the pleura of the lungs to that of the ribs extensively on both sides. The air-cells on both sides were gorged with bloody mucus, and portions of the lungs on both sides hepatized. The uterus and its contents were healthy.

(CASE 161.) Twelve years ago a patient of the Middlesex Hospital with organic disease of the heart, and who was seven months pregnant, sunk down dead suddenly. I was called to her half an hour after, when the action of the heart had entirely ceased. For several months previously, she had suffered much from violent fits of dyspnoea and palpitation of the heart.

(CASE 162.) On the 11th December, 1838, with Mr. Jorden and Mr. Potter, I examined the body of a woman who had died suddenly the previous day from organic disease of the heart. She was in the ninth month of pregnancy, and the fatal result was unexpected.

(CASE 163.) About two years ago a woman six months pregnant, was admitted into St George's Hospital, under the care of Dr. Chambers, with expectoration of blood, dyspnoea, and signs of valvular disease of the heart. The symptoms became gradually more urgent, and she died soon after the expulsion of the contents of the uterus. The tricuspid valve was diseased, and the lungs apoplectic.

(CASE 164.) At midnight, September 14th, 1832, Mr. Harvey, of Great Queen-street, requested me to see a patient with him in labour, who had the most distressing dyspnoea. She was held up at an open window, and was gasping for breath. The face was livid, the extremities cold, and oedematous. The os uteri was fully dilated, and the head had partially entered the brim of the pelvis. The pains had ceased.

Mr. Harvey informed me, that she had some valvular disease of the heart, and that dropsical symptoms appeared soon after she became pregnant. When labour came on, there was much difficulty of breathing experienced when she attempted to lie down, and as the first stage of labour proceeded, the dyspnoea increased, and became so severe that she seemed in danger of dying from immediate asphyxia. It was evident that she could not have long survived without being delivered, and that she had no power to expel the child. If the head had descended lower into the pelvis, it would have then been impossible to deliver her with the forceps, while held up by her friends before an open window. I opened the head, and extracted it with the craniotomy forceps. The alarming difficulty of breathing gradually subsided, and she was alive a year after, and in her usual state of health. In the foregoing cases, premature labour might have been induced with advantage.

(CASE 165.) A young married lady in the fifth month of her first pregnancy, who had previously been in good health, began to suffer from violent irregular action of the heart, aorta, and carotid arteries. Several eminent physicians were consulted, who believed from the violence of the symptoms that aneurism of the arch of the aorta existed. As pregnancy advanced, the patient became worse, and an unsuccessful attempt was made by an experienced accoucheur to induce premature labour. All who saw the case admitted that this was necessary, and the only means which could preserve her life; blood-letting, digitalis, and all other remedies having failed to afford relief. She continued to suffer so much during the last three months of pregnancy, that it was feared some unfortunate accident would occur during her delivery. Considerable oedema of the face, legs, and arms took place several weeks before the full period, with partial relief of the internal affection.

The labour took place in July, 1833, and was perfectly natural. The palpitation of the heart gradually disappeared, and she recovered quickly.

(CASE 166.) 3rd Sept. 1827, Madame Bassi, æt. 30, in the seventh and half month of pregnancy. During the last six weeks she has been suffering from constant severe pain of the abdomen, which has been rapidly enlarging during the last fourteen days, and is now greatly distended. The lower extremities are œdematosus, the respiration is impeded, and there is urgent thirst and pyrexia. The movements of the foetus have been unusually languid; bloodletting, and cathartics, and diuretics, were employed without relief: the dyspnoea and swelling of the abdomen continued to increase until the 10th, when uterine contractions came on, and a quantity of liquor amnii escaped, which the midwife represented as sufficient to fill all the empty vessels in the house. A foetus was afterwards expelled which showed no signs of life. Its abdomen contained lb.i. of serum, which was examined by Dr. Prout, and found to be albuminous, and closely resembling that of dropsy. The mesenteric glands were enlarged. The liver was of the natural size, but of a dark leaden colour, and of the consistence of coagulated blood. The spleen was larger and softer than natural. The peritoneum was highly vascular, and in several parts ecchymosed. The pericardium and general cavities of the thorax contained a considerable quantity of serous fluid. The lungs on the right side were healthy, and the left superior lobe; but the inferior had undergone a singular change, being converted into a mass of vesicles like hydatids, containing fluid, and enveloped by the pleura, which was very vascular. The placenta and membranes were not examined.

(CASE 167.) Mrs. Lewis, æt. twenty, was delivered, June 27th, 1828, of a still-born child, in the eighth month. The quantity of liquor amnii was excessive.

The abdomen of the foetus contained lb. ss. of a straw-coloured serum. The peritoneum was highly vascular. The liver was of the usual size, but of unnatural density. By the patient's account, her first child was also born prematurely, in a putrid state, and she attributed both these accidents to a syphilitic taint contracted from her husband.

(CASE 168.) 31st August, 1828, Catharine Netly, æt. thirty-seven, No. 415, Strand. About six weeks ago, while in the seventh month of pregnancy, she began to experience a sense of constant dull pain in the region of the uterus, and soon after perceived the abdomen to enlarge with unusual rapidity. The lower extremities became œdematous, the urine was secreted in sparing quantity, and the respiration difficult when in the recumbent position. The movements of the child were remarkably languid. All these symptoms having become more severe, and the abdomen greatly enlarged, labour pains commenced last night, and about five quarts of liquor amnii escaped, and soon after a dead and putrid foetus. I examined the foetus and its involucra with the greatest care, but could discover no appearance of vessels in the amnion, or lymph effused on its foetal surface. The chorion was also in a perfectly healthy condition ; the placenta was of the natural size, but its whole mass was unusually soft in texture, and a considerable portion of it was in an apoplectic state.

(CASE 169.) Mrs. Bryant, æt. thirty-four, No. 3, New Church-court, Strand, the 30th of August, 1828. Though she is only in the seventh month of her pregnancy, the abdomen is larger than it commonly is at the full period of gestation. The lower extremities are œdematous ; she suffers much from constant severe pain in the hypogastrium, dyspnœa, and cough ; the countenance is pale and anxious : the pulse quick : and there is urgent thirst, with scanty secretion of urine. These symptoms have been experienced during the last three months ; but the unusual enlargement of the ab-

domen was not perceived till the beginning of the seventh month of pregnancy, since which time it has been rapidly increasing. From the period of quickening, the movements of the foetus have been very feeble. An obscure fluctuation was felt in the abdomen. On examining per vaginam, the os uteri was closed, but the cervix uteri was obliterated as in the ninth month of pregnancy, and the presence of a large quantity of fluid could readily be detected in the uterus. The ballotement of the foetus was very distinct. Blood-letting, diuretics, &c. were employed without relief. The difficulty of respiration became greatly aggravated, the abdomen still more distended, and the urine secreted in smaller quantity during the succeeding two weeks, and on the 21st October, when the dyspnoea threatened suffocation, I ruptured the membranes, though there was no sign of approaching labour, and ten pints of liquor amnii were discharged. On the following day uterine contractions came on, and a living child was born, which has been reared. The placenta and foetal membranes, though minutely examined, presented no trace of disease. The mother continued to suffer from dyspnoea, and anasarca of the lower extremities for several weeks, but ultimately recovered. An obscure fluctuation in the abdomen was perceptible for some time after delivery.

(CASE 170.) A lady, thirty years of age, was delivered of a feeble child, at the seventh and half month. The liquor amnii amounted to six pints, and the unusual swelling of abdomen subsided after its escape. The peritoneal sac of the child contained  $\frac{3}{4}$  iv. of serum, and the whole cellular membrane of the body was greatly distended with fluid. The pleura covering the lungs on both sides was studded with small tubercles, and also the surface of the liver and spleen. The placenta was three times the common size, and a considerable portion of its structure was converted into a soft yellow matter like fat.

(CASE 171.) On the 21st September, at nine p. m. 1839, Mr. Young, of Piccadilly, requested me to see a patient in the seventh month of pregnancy, with dropsy of the amnion. The abdomen was so enormously distended, that she could not for an instant assume the horizontal position. Fluctuation was distinctly perceived, as in cases of ascites. The cervix uteri was obliterated, and the movements of the child in the liquor amnii felt. The abdomen had begun suddenly to enlarge three weeks before, and urgent dyspnoea soon followed. From the lividity of the countenance, the distressing sense of suffocation, and the coldness of the extremities, it could not be doubted that she would speedily sink if not relieved. I passed up the stiletted catheter into the uterus without difficulty, and punctured the membranes at three points. The liquor amnii immediately began to flow profusely, and before the morning ten quarts had escaped, and two premature foetuses had been expelled without difficulty. She recovered favourably.

(CASE 172.) At three p. m., on the 2nd January, 1840, Mr. Hutchinson, of Guildford-street, called me to see a lady four or five months pregnant, affected with dropsy. The abdomen was much swollen, and the face, trunk, and extremities oedematous. The difficulty of breathing was so urgent, that she was supported sitting upon the edge of the bed with the feet resting upon a chair. It was obvious, if the symptoms were not relieved, that she could not live many hours. The symptoms had commenced in the second month of pregnancy, and had increased rapidly during the previous week. Diuretics, blisters, and drastic cathartics had been employed by Dr. Roots, and Mr. Hutchinson, without the slightest benefit. On perforating the membranes, an immense quantity of fluid rushed from the uterus, and continued to flow till the floor of the apartment was deluged. Although the size of the abdomen was reduced, the difficulty of respiration continued, with lividity of the

lips, and rapid pulse. Six hours after the discharge of the liquor amnii, the os uteri was dilated to the size of a crown, but there were no labour-pains. The distressing symptoms continued till the afternoon of the 3rd, when the foetus and placenta were expelled without hemorrhage. The power of swallowing was soon after lost, and she died in a few hours. 1b.iv of serum were found in the sac of the peritoneum, and 5iii. in the pericardium. The heart was sound. The lungs were gorged with serum, and portions were unusually dense and sank in water. The liver was healthy, the kidneys were harder than natural, the cortical part cutting like hard pork. The corpus luteum presented the usual appearance, both layers of the Graafian vesicle being enclosed within the yellow matter, and this was in immediate contact with the stroma of the ovary which contained it. The amnion was carefully examined, and was without blood-vessels.

In five of the cases now related, there existed with dropsy of the amnion some malformed or diseased condition of the foetus or its involucra, which rendered it incapable of supporting life subsequent to birth, and the same circumstance has been observed in most of the cases which have been recorded by the authors alluded to. In two only of the preceding cases was the formation of an excessive quantity of liquor amnii accompanied with inflammatory and dropsical symptoms in the mother; and in none did the amnion, where an opportunity occurred for making an examination, exhibit those morbid appearances produced by inflammation, which M. Mercier has described, and which led him to infer that inflammation of the amnion is the essential cause of the disease. When unconnected with a dropsical diathesis in the mother, I am disposed to consider it merely as one of the numerous diseases of the foetus and its appendages which sometimes occur independently of any constitutional disorder in the parents, and with the causes of which we are wholly unacquainted. The diag-

nosis of dropsy of the amnion is most difficult in the simple form of the disease, where the effusion has taken place to a great extent, and when complicated with ascites. In both these cases, fluctuation more or less distinct can be perceived on percussion of the abdomen, but we can obtain from this sign no positive information, to enable us to determine whether the fluid be contained in the cavity of the peritoneum, amnion, or in both these membranes. In the simple form of dropsy of the amnion, where the quantity of fluid is not excessively great, the fluctuation is obscure, deep-seated, or wholly imperceptible. The presence or absence of fluctuation is, therefore, no certain test of the existence of the disease, and the only mode of arriving at a correct diagnosis, both in its simple and complicated forms, is by instituting an examination per vaginam. By this proceeding we shall not only be able to ascertain the changes in the uterus consequent on impregnation, but the accumulation of a preternatural quantity of fluid in the membranes of the ovum. This latter circumstance is known by the unnatural enlargement of the body of the uterus, by the state of its cervix, which is prematurely obliterated by the ballotement of the foetus, which is remarkably distinct, and by the sense of fluctuation in the vagina on percussion of the abdomen. In ascites complicated with pregnancy, Scarpal has observed in his memoir on this subject, published in 1817, that the symptoms are entirely different from those of hydrops amnios. The regular form of the fundus, and body of the pregnant uterus, he states, is not evident to the touch in these cases, from the enormous distention and prominence of the hypochondria, arising from the great quantity of fluid interposed between the fundus and posterior part of the uterus and abdominal viscera. The urine is scanty and lateritious, and the thirst is constant. The abdomen, upon percussion, presents a fluctuation obscure in the hypogastric region and in the flanks, but suffi-

ciently sensible and distinct in the hypochondria, and strong and vibratory in the left hypochondrium, between the edge of the rectus muscle and the margin of the false ribs. These symptoms, with the previous history of the patient, may afford us, in doubtful cases, some assistance in the diagnosis, but our principal dependence must be placed on the information acquired by a careful examination of the state of the cervix and body of the uterus.

Having arrived at a correct diagnosis, the treatment of dropsy of the amnion becomes simple. Our object ought to be to relieve the urgency of the symptoms occasioned by the over-distention of the abdominal cavity, and the only safe mode of giving this relief is, by puncturing the membranes, and evacuating the superabundant liquor amnii. In four of the cases now related, this was had recourse to with success, and in one the life of the child was preserved. In another, the mother's life would have been saved had this been done at an earlier period. In all the other cases, the spontaneous rupture of the membranes was followed by alleviation of the symptoms, and the birth of a child rendered by disease incapable of supporting life; a further proof that the evacuation of the liquor amnii is attended with beneficial consequences. The artificial rupture of the membranes, if the operation be carefully performed, is not more dangerous than the spontaneous rupture, and if the ease and safety of the mother can be ensured, we ought not to be induced to delay its performance by apprehension for the life of the child, since from its diseased state, in the greater number of instances, it will be still-born. The only difficulty that can arise respecting the treatment, is in cases of dropsy of the amnion complicated with ascites. Even here I would recommend the evacuation of the liquor amnii, as the best remedial measure that can be had recourse to, since it relieves the leading symptoms produced by the pressure of the excess of fluid in the peritoneum and amnion on the neighbour-

ing organs, which are the only symptoms necessary to be counteracted. After delivery, the effusion into the peritoneal cavity, if it depend on utero-gestation, will gradually disappear.

(CASE 173.) Mr. Beaman, of King-street, Covent-garden, requested me to see a patient in Lambeth-street, who was in the fourth month of pregnancy, and had suffered for several weeks from incessant vomiting, with pain of epigastrium and fever. When every kind of treatment had failed, I punctured the membranes of the ovum, and discharged the liquor amnii. The vomiting ceased immediately after, and the fever subsided, though the foetus was not expelled for several weeks.

(CASE 174.) In October 1836, Mr. Webster, of Connaught-terrace, called me to see a patient, who was two months pregnant, and who had been attacked with faintness, violent sickness, and headache, soon after conception, and which had been gradually becoming more distressing. There was great emaciation and fever. The tongue was red, and the epigastrium tense and painful on pressure. The symptoms having assumed a very alarming character, and all remedies being useless, we resolved to puncture the ovum, and for this purpose the instrument was introduced into the uterus, but no liquor amnii followed. The vomiting, however, began immediately to subside, and she went to the full period, and was safely delivered of a living child.

(CASE 175.) On the 17th May, 1838, I saw a lady with Drs. Ramsbotham and Ashwell in the early period of pregnancy, who had violent vomiting, great tenderness of the epigastrium and right hypochondrium, yellowness of the eyes, thirst, and quick pulse. The emaciation was so great, that had it proceeded much further, she would probably have become completely exhausted. Had the symptoms not subsided under the use of calomel, the repeated application of leeches to the region of the liver, and very low diet, it would soon have been necessary to induce abortion.

(CASE 176.) A young married lady was attacked with constant sickness and vomiting, at the commencement of the third month of her first pregnancy. It continued, in spite of all remedies, for ten weeks, when she was reduced to a state of the greatest emaciation and debility. When apparently dying, I recommended the induction of premature labour, but her husband and relations would not consent to the operation. For a considerable period, nothing was retained upon the stomach, except a little brandy and water, and no hope was entertained of her recovery. Without any evident cause, the symptoms, however, gradually subsided, and she was safely delivered at the end of the seventh month of a dead child, with a diseased placenta. In this case the membranes, I think, should have been perforated long before the proposal to do so was made.

(CASE 177.) A lady, æt twenty-nine, being six weeks pregnant, suffered severely from sea-sickness on the passage from Dublin to Liverpool, at the end of June, 1839. The irritability of the stomach gradually became more distressing after her arrival in London at the beginning of July, and nothing was retained except a little brandy and water for twenty days. Prussic acid, effervescing draughts, calomel and opium, leeches, laudanum, and blisters to the pit of the stomach and region of the uterus, and all the other ordinary remedies, were totally useless. The emaciation and fever had become so great on the 23rd July, that it was evident she would soon die if not relieved. Dr. Merriman then saw her along with Mr. Jorden and myself, and advised the mixtura creta to be given, and creosote, and abortion to be induced if the symptoms were not relieved. To prove the necessity of great caution in this proceeding, Dr. Merriman related to us a case of vomiting during pregnancy, which had occurred some years before to a celebrated accoucheur, which had ended fatally after the performance of this operation, and for which he had unjustly incurred much odium. On the

24th, the symptoms being still more alarming, I evacuated the liquor amnii. Calomel, opium, and prussic acid, with bicarbonate of soda, and a blister to the epigastrium, were ordered, but they did no good. On the 27th July, the ovum was expelled, and a considerable quantity of coagulated blood, and she soon after began to sink, and died in a few hours. Drs. Chambers and Bright were also consulted in this distressing case. The coats of the stomach and bowels, and all the other viscera, were in a healthy state, and no morbid appearances could be detected in the membranes of the human ovum.

(CASE 178.) On the 14th November, 1841, Mr. Russell, of Broad-street, called me to see a patient near the full period of pregnancy, who had suffered for ten days from profuse discharge of blood from the intestines. At first it was supposed to proceed from piles. Great sickness and vomiting, rapid feeble pulse, sallow complexion, were the general symptoms. Some cathartic medicine was at first given to evacuate the bowels, but little feculent matter was discharged, and with it a pint of pure fluid blood. The pulse becoming still more feeble, and the patient more exhausted and unable from the sickness to retain the lightest food, and there being no sign of labour appearing, the membranes were opened on the 16th, but the liquor amnii was not discharged. On the 22nd, labour, however, came on, and an arm presenting, Mr. Russell passed the hand into the uterus, and delivered by turning. The child had been dead some time, as we had previously suspected from the pulsations of the foetal heart not being heard. On the 23rd the patient was much better, and recovered completely.

(CASE 179.) A young woman in the sixth month of her second pregnancy, died of chorea on the 29th August, 1840, in St. George's Hospital. The symptoms were at first slight, and were apparently produced by a fright. The convulsive movements became so

violent, that it was found necessary to put on a strait waistcoat and fix her down to the bed. Forty-seven hours before death, the contents of the uterus were expelled. The brain and spinal cord were perfectly healthy. There were some small vegetations on the mitral valve. The right kidney and ureter were wanting. The supra renal capsule was present. The uterus was in a natural state. The corpus luteum was unusually small, and the coats of the Graafian vesicle could scarcely be seen within the yellow matter. When the treatment failed to relieve the symptoms, and they became violent and dangerous, would it have been advisable to try the effect of inducing premature labour ?

## FOURTH REPORT.

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### DIFFICULT LABOURS FROM PRESENTATIONS OF THE SUPERIOR EXTREMITIES, NATES, AND FUNIS.

THE histories of sixty cases of arm-presentation are contained in this report. In a large proportion of these, the operation of turning was undertaken in the most unfavourable circumstances, both for the mothers and their children, after the liquor amnii had entirely escaped, and the uterus had not only been contracting for many hours around the child, but repeated unsuccessful efforts had been made to deliver. Seven women died from rupture of the uterus, and three from inflammation of the uterus. Laceration and inflammation of the uterus are, therefore, the consequences to be dreaded after turning. Four of these cases of rupture occurred in the practice of other accoucheurs, and three in patients under my own care, and where no great difficulty was experienced, or force employed in turning. The most perplexing cases were those in which there was distortion of the pelvis with arm-presentation, and the most easy and successful those twin cases in which the superior extremity of the second child presented, and the operation of turning was promptly performed.

Forty presentations of the shoulder or arm, occurred in the Dublin Lying-in Hospital, during the seven years

Dr. Collins was master. Sixteen thousand six-hundred and fifty-four labours took place. Thirty-three of the children were turned, of which twenty were born alive. In six, delivery was effected by breaking down the thorax. In one, the arm descended with the breech : the birth was premature, sixth month, and the child putrid. In three of the forty cases, the uterus was ruptured ; seven of the forty were twin children. Dr. Ramsbotham has related nineteen cases of presentation of the shoulder or arm ; ten were delivered by perforating the thorax, or separating the head from the body ; seventeen by turning : in one spontaneous evolution took place : and in one the child was expelled double. Two of the mothers died, eighteen of the children were still-born.

(CASE 180.) On the 10th October, 1823, in a public institution, a case of preternatural labour occurred, and the uterus was ruptured before or during the operation of turning. The arm of the child was in the vagina, and the uterus contracting strongly during the time an unsuccessful attempt was being made to turn the child with the right hand. Being fatigued from the pressure, the right hand was withdrawn, and on the left hand being introduced into the uterus, a rent was discovered to have taken place on the left side, through which the foetus had wholly escaped into the peritoneal sac. The hand was passed through this opening, the feet grasped, and without much force being employed the foetus was drawn back into the cavity of the uterus, and extracted. I did not see the patient till ten hours after she had been delivered, and was then almost disposed to doubt the accuracy of this statement from the absence of every symptom of rupture of the uterus. The pulse was seventy, there was no vomiting, and no tenderness of the abdomen. On the 12th there was no quickness of pulse, vomiting, or pain in the region of the uterus ; but these symptoms occurred on the 13th, and she died on the 17th, apparently from peritonitis.

I examined the body on the 18th, and found the omentum, intestines, and liver covered with lymph, and adhering together. The uterus was as much reduced in size as usual six days after delivery. On the left side its lower part adhered firmly to the bladder and surrounding peritoneum, so that no appearance of laceration could at first be detected in the uterus. When removed from the pelvis, and the lymph peeled off, a rent two inches long was seen in the peritoneal coat of the uterus, but the edges were in close contact, and had been kept together by a layer of lymph. On cutting into the cavity of the uterus, a great ragged opening was seen in the lining membrane and muscular coat on the left side. But for the attack of peritoneal inflammation, this woman would in all probability have recovered, and nature repaired the injury inflicted upon the uterus.

(CASE 181.) On the 1st August, 1824, at eight p. m., I was called by a midwife to Mrs. Sims, æt. twenty-four, residing at No. 3, Little White Lion-street. The right arm of the foetus presented, and was low in the vagina, with a large portion of the umbilical cord, without pulsation. The shoulder and thorax were squeezed into the brim of the pelvis, with the os uteri widely dilated. The liquor amnii had all escaped several hours. I passed the right hand into the uterus, so as to touch one of the feet with my fingers, but it was contracting so strongly, that it was impossible to grasp the foot and turn. Being exhausted by the efforts made to complete the delivery, and afraid of rupturing the uterus, I abandoned the case to a more experienced practitioner, who succeeded, after long and violent efforts, in bringing down the feet and delivering. Great tenderness of the uterus, with fever, took place on the evening of the second day, and she died in forty-eight hours of uterine inflammation. Had twenty ounces of blood been drawn from the arm, a large dose of laudanum been administered, and the

operation of turning delayed for some hours, it is probable this case would have ended more favourably.

(CASE 182.) October 15, 1824, Great St. Andrews-street. Membranes ruptured four hours, and liquor amnii entirely discharged. The pelvis was distorted, but not very much. The right arm swollen and livid, protruding out of the os externum, and the shoulder and a part of the thorax wedged in the pelvis, the uterus contracting forcibly upon the body of the child. Pulse quick, face flushed, vagina hot, dry, and tender. 3l. of blood were drawn from the arm at two bleedings, and one hundred drops of laudanum, in two equal doses at short intervals, were administered, before any very strong efforts were made to turn, but no remission of the pains followed. Two hours after, the pains still continuing, I attempted to turn, but could not succeed, as the hand was soon rendered useless by the pressure. This effort to turn was continued for an hour and upwards, and it seemed probable the uterus would be ruptured if I persisted. Another practitioner, of much greater experience, then tried to turn, and used far greater force than I had done, and continued the effort for a much longer period, but he was also compelled to desist. I then separated the arm at the shoulder joint, perforated the thorax, and fixing the crotchet on the spine, drew the child through the pelvis doubled up. This patient recovered favourably, and has since been delivered of a child, the nates of which presented, and the life of which was destroyed by the difficulty of drawing the head through the distorted brim.

(CASE 183.) On the 1st May, 1827, Mrs. Richards, Charles-street, Drury-lane, had been two days and two nights in labour, and was quite exhausted. The left arm, much swollen, was presenting, and around it a loop of the umbilical cord, which did not pulsate. There was great thirst and restlessness. Pulse quick, and the abdomen was tense and painful on pressure. The uterus was contracting around the body of the child

with great force, and I found it impossible to pass up the hand, or to push back the presenting part, so closely was it impacted in the pelvis. Sixteen ounces of blood were drawn from the arm, and an opiate given at four A. M. At seven the pains had nearly ceased, but were renewed with great violence on attempting to pass up the hand. The child being dead, I proceeded without delay to deliver as in the last case, and though greater difficulty was experienced in extracting the child, the patient sustained no injury. Here also there was contraction of the pelvis, and a fistulous opening between the bladder and vagina of several years duration, from sloughing of the parts after a protracted labour, and the employment of the forceps.

(CASE 184.) On the 14th May, 1827, I saw a patient in King-street, Drury-lane, in whom the left arm of the foetus presented, and the shoulder and thorax were forced deeply into the pelvis. The umbilical cord was hanging out of the external parts, and did not pulsate. The uterine contractions were strong, and were much increased on attempting to turn. The delivery was easily effected, as in the two last cases.

(CASE 185.) Mrs. Manning, æt. twenty-two, 131, Drury-lane, 3rd December, 1827, had been several days in labour under the care of a midwife, before it was ascertained that an arm was in the brim of the pelvis along with the head. When Mr. —— was called, he found this to be the case, and passed up his hand into the uterus to turn the child. He brought down only one foot, and left this in the vagina, after being exhausted with the efforts he made to turn. After several unsuccessful efforts, repeated at intervals during a day and night, I was called to see the patient. I found the left leg in the vagina, and the head and thigh in the brim of the pelvis. Uterus still contracting strongly. After taking away twenty-four ounces of blood, I endeavoured to push the head aside, and bring down the breach, but to no purpose. As the child was

dead, I perforated the head, evacuated the brain, and endeavoured to extract it with the crotchet, but did not succeed till the thigh and leg had been pushed above the brim. The shoulders were dragged through the brim of the pelvis with difficulty, and I afterwards ascertained that there was considerable distortion of the pelvis. Severe inflammation of the uterus followed, which yielded to blood-letting.

(CASE 186.) Sarah Oulton, 9th April, 1827. The arm presented, the liquor amnii discharged, uterus contracting, and the delivery was effected with great difficulty. She died of inflammation of the uterus a few days after. Child still-born.

(CASE 187.) Mrs. Bain, 18th December, 1827, 5, Wellington-square, Gray's-inn-lane. Labour had continued twenty-four hours. Membranes ruptured three. The arm and funis presenting. Os uteri partially dilated, high up. An arm and long loop of the cord, which pulsated, were in the upper part of the vagina. Passed the right hand with some difficulty into the uterus, and got a finger into a ham, and soon turned the child. The cord was compressed in doing this so much, in spite of all that I could do, that its pulsations gradually became more and more feeble, and they had ceased long before the child was born. Recovered.

(CASE 188.) On the 12th February, 1827, called by a midwife to a labour at No. 1, Porter-street, Newport-market. An arm presented. I turned, and delivered without much difficulty. The child had been dead for some time, the cuticle was peeling off, and it had not reached the full period. Another bag of membranes was felt. The arm of the second foetus likewise presented, and it was also turned and delivered. A third was delivered naturally about an hour after. They were all dead, two boys and a girl. Recovered.

(CASE 189.) March 25, 1828. At ten p. m., saw a case in Wild's-court, where the right arm and umbi-

lical cord presented. The membranes had been ruptured nine hours, and the liquor amnii had entirely escaped. There was little uterine contraction. I passed the right hand easily into the uterus, and brought down a foot, and turned. The head was extracted with difficulty, from the chin getting over the front of the pelvis. Child still-born. This was her second child. The nates of the first presented, and was also still-born. Recovered.

(CASE 190.) 20th April, 1828, at three A. M., saw an out-patient of the Brownlow-street Hospital, in Stewarts-rents, Drury-lane. One child had been expelled in the natural manner, but I found the right arm of the second in the vagina. The pains were not strong, and the hand was easily passed into the uterus, the feet seized and brought down. Child alive. An hour had elapsed from the expulsion of the first before the second was delivered. Recovered.

(CASE 191.) April 26, 1828. At eight A. M. saw a patient in Vine-street, Chandos-street, who had been in labour five hours. The right arm and a long loop of the umbilical cord were hanging out of the external parts. It did not pulsate. The uterus was not contracting strongly, and I never accomplished the operation of turning with greater ease. As the placenta did not come away in the usual time, I passed up the hand to remove it, and found itadhering partially to the uterus. There was no difficulty in detaching and withdrawing the placenta, but while doing this, I felt a rupture in the neck of the uterus and vagina. On introducing the hand, I discovered an immense laceration, through which a portion of intestine was protruding. There was no hemorrhage. On the 27th, there were no unfavourable symptoms, but she became delirious. The pulse rapid, the countenance collapsed, frequent vomiting, offensive discharge, and she died on the 30th April. There was a rent four inches long in the posterior part of the uterus. The vagina was sound.

(CASE 192.) August 19, 1828, Mrs. Hart, 43, Charles-street, Drury-lane, a patient of Middlesex Hospital. The right arm presented. The liquor amnii had entirely escaped, yet there was no contraction, and I had no difficulty in passing the hand up, seizing a knee, bringing it down, and turning. The child alive. I never turned with so much ease. The pelvis large, the parts dilatable, uterus quiet. Yet the delivery was followed by severe inflammation of the uterus, which yielded to bleeding.

(CASE 193.) At four A. M., Sunday, 15th June, 1828, saw a case at 43, Foley-street, the left arm and funis presenting, under the care of Mrs. Marsh. It was her second child. The labour commenced on Friday evening, and continued the whole of yesterday, Saturday, till seven P. M., when the membranes gave way. Although the presenting part could not be felt, the mid-wife continued to attend without much anxiety till three this morning, when she found the funis and arm presenting. I found about a foot of the cord protruding, and without pulsation. The pains were strong and frequent. I gave 120 drops of laudanum, and waited half an hour, when the pains diminished. I then passed up the right hand, and seized a knee, which I brought down easily. I could not reach the other, but pulling gently on the thigh, the breach descended and was soon expelled. The remainder of the child was easily extracted. The placenta soon followed, and the laudanum did not prevent the uterus from contracting. No hemorrhage. Recovered.

(CASE 194.) September, 18, 1828, a patient of the Westminster Dispensary, at 26, Little St. Andrews-street. One child had been born alive, and not long before I found the arm and shoulder of a second protruding out of the os externum. Though there were labour-pains, I passed up the hand with great ease and brought down the feet. The child was still-born.

(CASE 195.) December, 15, 1828. At two o'clock

this morning, called to the Brownlow-street Hospital, to deliver in a case where the arm presented. It was supposed the breech presented, and in consequence I did not see the case till the liquor amnii had nearly all escaped, and the left arm and thorax of the child had been pressed deeply into the pelvis. The membranes gave way at ten last night. The uterine contractions were so strong and frequent, that I could not pass the hand without using too much force. V. S. ad  $\frac{5}{6}$ xx., laudanum ninety drops. In twenty minutes the strength of the pains had diminished, and without much difficulty I introduced my left hand and got hold of a foot, and accomplished the operation with great ease. The placenta soon followed. Child was not alive. Recovered.

(CASE 196.) Jan. 3d, 1829. Dr. Jewel requested me to see a case in which the arm presented, and where he could not accomplish delivery by turning. He had first given sixty, and then forty drops of laudanum, yet the os uteri continued so contracted, and the pains so strong, that the hand could not be introduced to turn. The os uteri not being fully dilated, and very high up, great difficulty was experienced, after the removal of the arm and perforation of the thorax, in getting the crotchet over the spine. At last, however, it was effected, and the delivery was accomplished without any injury to the mother.—V. S. Opiates and rest for many hours would in all probability have rendered the operation both safe and easy.

(CASE 197.) Jan. 9th, 1829, at three A.M., requested by Dr. H. Ley to visit a patient for him in White-horse yard, Drury-lane. She had been in labour all the day. I found the right arm without the external parts. The pains were slight. I introduced my right hand, and soon got hold of a foot, but had some difficulty after in turning. I succeeded, however, in about twenty-five minutes. Child still-born. Recovered.

(CASE 198.) Friday, 29th May, 1829, 14, Prince's-

row, Newport-market. Mrs. Buck. In labour for four days, but pains feeble, The liquor amnii escaped on Monday ; the left arm much swollen in the vagina ; the os uteri contracted and rigid around the shoulder. At 9 A.M. ordered V.S. ad  $\frac{5}{3}$ xvi. At one P.M., os uteri less rigid and more dilated, and I proceeded to pass up my left hand, and had no great difficulty in seizing a foot, which was soon brought into the vagina, and the turning was easily accomplished. In about ten minutes she had a most violent rigor. The placenta being detached, was soon removed, the uterus having previously contracted firmly. The rigor became more and more violent, and the pulse extremely feeble. She recovered a little, but died in eight hours. The body was not allowed to be examined, but it was my conviction that the uterus had been lacerated. Child still-born. I regretted not bleeding this patient to a far greater extent before turning.

(CASE 199.) 2nd June, 1829. A woman in Great Earl-street was delivered of a child alive this morning at one o'clock ; the breech presented. The midwife discovered that there was a second, but waited four hours for its expulsion, supposing the nates also to present. The pains were strong all this time. I found the left arm swollen in the vagina. I used great force to introduce my hand to turn, but could not succeed without certain risk of injury to the uterus. I therefore drew down the presenting arm and the shoulder to the outlet of the pelvis, then passed my hand into the vagina, and grasping the chest and abdomen of the child, brought them through the pelvis without difficulty. The child passed out completely doubled up.—Recovered. The arm was not removed, nor the thorax perforated in this case. Tenderness of uterus followed the operation.

(CASE 200.) On the 8th of November, 1829, a case occurred in Vere-street, of distortion of the pelvis, with presentation of the arm. The labour had commenced the preceding night, but the presentation had not been ascertained till the following morning at eight o'clock,

when a practitioner was called by the midwife to perform the operation of turning. Long and violent, but unsuccessful efforts, were made to bring down the feet. Another accoucheur was then called, but his attempts to turn being equally fruitless, he detached the arm from the shoulder, and renewed the attempt to turn the child. At one o'clock both gentlemen being completely exhausted, I was requested to see the patient, and endeavour to deliver her. The vagina was enormously swollen, the thorax of the child occupied the brim of the pelvis, and on passing up the right hand, between this part of the child and the anterior part of the pelvis, the points of the fingers touched one of the feet ; but I could not succeed in passing the hand sufficiently high up to grasp the foot. I succeeded, however, in passing a pair of small craniotomy forceps along the palm of my hand to the foot, and drawing it down into the vagina. The nates and trunk of the child were soon extracted, but the head would not pass through the brim of the pelvis till it had been perforated behind the ear, and drawn down with the crotchet. The patient died on the second day after delivery from laceration of the orifice and neck of the uterus. There was an unusual projection of the base of the sacrum.

(CASE 201.) At one A. M. 28th July, 1829, a case of presentation of the right arm occurred in Museum-street. The os uteri was fully dilated, the membranes ruptured, the pains few and feeble. I passed up the hand between the front of the pelvis and child, and had no difficulty in bringing down the feet. Recovered.

(CASE 202.) In the autumn of 1829, a case of arm presentation occurred in Adam and Eve-court, Oxford-street. The patient remained three days with the arm, immensely swollen, and cord hanging out of the external parts. She would not allow the operation of turning to be performed by any medical practitioner, and expressed her determination to die undelivered. I was informed that she afterwards, when completely exhausted, con-

sented to have the child delivered by a midwife, and that the operation of turning was performed. Recovered.

(CASE 203.) She was in labour again on the 14th of August, 1831, and the right arm presented. She was under the care of Mr. Prout, but would not allow him to interfere, having resolved to sacrifice her life on this occasion ; and she was again three days and nights, in strong labour, and ultimately the child, though at the full time, was forced through the pelvis, doubled up in a putrid state : the head was flattened, and the contents of the abdomen pressed through the parietes. She recovered without a bad symptom.

(CASE 204.) On the 22nd of May, 1830, I was called by a midwife to Mrs. Haddon, æt. 30, residing at No. 3, Castle-street, Bloomsbury. The membranes had been ruptured, and the liquor amnii discharged a week before. Slight irregular pains had been felt during the whole of this time, but the os uteri was high up, and the presentation was not ascertained till the morning of this day. The left arm, with the cuticle peeling off, was then found, to the surprise of the midwife, hanging out of the vagina, and the shoulder and a great part of the thorax squeezed into the brim. The uterine action was not very strong, yet the uterus grasped the body of the child so firmly, that I could not introduce the hand without using a degree of force which did not appear justifiable, as the child was dead. Every attempt to pass the fingers through the os uteri roused it to violent expulsive efforts. I removed the arm at the shoulder, perforated the thorax, and drew it out with the crotchet doubled up. Tenderness of the uterus followed, which was relieved by bleeding. Recovered.

(CASE 205.) On the 29th of August, 1830, No. 1, Brown-court, Edgware-road, a case of twins occurred. The first child had been born four hours before ; the arm of the second presented. As the membranes were unruptured, and the uterus in a state of perfect rest, no

difficulty was experienced in bringing down the feet of the second child, and delivering it alive. Recovered.

(CASE 206.) On Wednesday evening, the 22nd of September, 1839, I was requested to visit a patient in whom the right arm presented. Labour commenced the preceding evening with rupture of the membranes and escape of the liquor amnii. Pains followed in the course of the night, but the presentation could not be ascertained till the following morning, when an arm was felt at the os uteri. The midwife attempted to turn the child, but could not succeed. In the course of the day the medical attendant likewise attempted to bring down the lower extremities, but the rigidity of the os uteri prevented the introduction of the hand into the cavity. In the evening I endeavoured to pass my hand, but could not overcome the contraction of the orifice ; the right arm, and a large loop of the funis, were hanging out of the external parts. Fifteen ounces of blood were drawn from the arm, and fifty drops of laudanum administered. Three hours after, another attempt was made to deliver by turning, but it was likewise unsuccessful from the same cause. Again, in the morning, the bleeding having been repeated to a far greater extent, another effort was made to pass the hand : but this also failing of success, the medical attendant then proceeded to deliver, by removing the arm at the shoulder-joint, and eviscerating the child. Nearly three hours were spent in tearing down the thorax, and drawing the trunk and extremities through the pelvis. In effecting this, the cervical vertebrae were unfortunately torn, and the head left within the cavity of the uterus. A broad roller was passed firmly around the abdomen, and the left hand immediately introduced into the cavity of the uterus, and the finger placed in contact with the head. The point of the perforator was carefully conducted along the palm of the hand, and between the fore and middle fingers, to the most dependent part of the head, and a free opening made. The crotchet was then passed up, and introduced

through this opening within the skull, and the head extracted with the hand and crotchet. The head was drawn out with difficulty, from the rigid state of the cervix uteri. She died soon after. More copious blood-letting and larger doses of laudanum should, I think, have been employed in this case, and still more time given for relaxation of the os uteri to take place.

(CASE 207.) On the 24th October, 1830, in a patient of the British Lying-in Hospital, labour commenced at two A.M., and at seven the membranes were ruptured, and the left arm descended low into the vagina. The pains were strong, but the intervals between them were long. The whole liquor amnii had escaped. I passed the right hand into the uterus, and directed it to the left side, where it came in contact with a knee, which I seized, brought down, and without difficulty turned, and delivered the child alive. Recovered.

(CASE 208.) On the 4th December, 1830, I examined the body of a woman who had died four hours after being delivered by the operation of turning. The mucous and muscular coats of the uterus were deeply lacerated at the back part of the cervix. This patient had been two days in labour under the care of a midwife before the presenting part was felt, and then an arm was found low down in the vagina. The practitioner, who had been called to deliver, had experienced great difficulty in turning.

(CASE 209.) In June, 1831, I met with a case of twins in private practice. The head of the first presented, and was expelled without assistance. On putting the hand over the abdomen, I felt a second, and soon ascertained that the arm presented. Before the uterus had time to contract upon this child, and the membranes to be ruptured, the coat was off, the arm bare, covered with lard, introduced, and the feet brought down into the vagina. The binder was then firmly applied, and when the uterus began to act, the child was extracted alive. The placenta came away in due time, and no hemorrhage took

place. Had this case been left for a short time, it is probable great difficulty would have been experienced in turning, the child would have been dead, and the mother might have been destroyed.

(CASE 210.) December, 1831. Another case of twins occurred to me in private practice, at No. 20, Well-street. The nates of the first and the arm of the second presented. By losing no time in bringing down the feet of the second, it was also born alive, and the mother recovered.

(CASE 211.) On the 3rd Nov. 1831, I was called to a patient of the Southwark Lying-in Institution, in whom the arm presented. The membranes had long been ruptured, and the liquor amnii discharged, and the uterus was firmly contracted around the body of the child. Great difficulty was experienced in passing the hand into the uterus and turning. The child was dead ; the mother recovered.

(CASE 212.) On the 18th August, 1833, at No. 27, King-street, Golden-square, I saw a case in which an arm presented, and the medical attendant had made long and zealous, but useless efforts to accomplish delivery by the Hippocratic method, viz. pushing back the arm that the head might come down. I passed the hand into the uterus, and brought down both feet at once, and easily delivered, but the child was dead.

(CASE 213.) 13th February, 1833, at No. 5, Short's Gardens, I saw a case of labour, in which the right arm presented,—the membranes had been ruptured some hours, but the uterus was not contracting, and no difficulty experienced in bringing down the feet and extracting the trunk and extremities ; but when this was done, I found it impossible to draw the head through the brim of the pelvis. The child being dead, the crotchet was passed, and the point forced into one of the orbits. R.

(CASE 214.) Fourteen days before this, a case of twins occurred in the lying-in ward of the S. M. I. The arm of the second child presented, and the pains were

so violent, that it was driven through the pelvis doubled up. The hand could not be introduced to turn, so vehement was the uterine action, and so low had the shoulder and thorax descended into the pelvis. The child was small and still-born.

(CASE 215.) On the 23d of October, 1833, in Plum-tree-street, Mrs. Farrel called me to a case of twins. The arm of the second presented, but it was dead. Dangerous hemorrhage followed the expulsion of the placenta. Pressure, the application of cold water to the external parts, and stimulants, were the means successfully employed.

(CASE 216.) 2nd January, 1834. Mr. Garden called me to a case of labour, in Charlotte-street, in which the right arm presented. The membranes had not long been ruptured. The shoulder and arm low down. The uterus acting, but not forcibly. I passed the right hand and brought down a foot; and from the difficulty experienced in turning the child round, regretted that both had not been brought down at once. Child dead. Mother recovered.

(CASE 217.) On the 14th July, 1834, Dr. H. Davies induced premature labour in a patient with distorted pelvis, in the British Lying-in Hospital. The left arm presented, and he turned, but the child was dead. Mother recovered.

(CASE 218.) 2nd March, 1836, a case in which the left arm and umbilical cord, without pulsation, presented, occurred in James-street, Oxford-street. The pains were feeble. Os uteri half dilated, but not rigid. Pelvis large. Second child. Passed the right hand up between the front of the pelvis and shoulder, along the presenting arm, and soon got hold of a knee and turned.

(CASE 219.) On the 31st July, 1836, I attended a lady in labour, who had been delivered twice before, and both her children had been still-born, in consequence of an arm presenting, and the operation of turning

being required. On this occasion, several weeks before the labour commenced, she expressed her conviction to me that the child was in the same position as in her former labours. Labour-pains began on Sunday morning, the 31st July, and continued feeble and irregular till three p. m. On examining, the os uteri was then found dilated to the extent of half-a-crown, and the membranes protruding in an unusually elongated form. The presenting part could not be felt. I examined again in three hours, and found the dilatation considerably advanced, and the membranes protruding still more into the upper part of the vagina, and high up the finger touched some part of the child which was more pointed and moveable than the head. She remained in the horizontal position, that the membranes might be preserved entire as long as possible, till turning could be most advantageously performed. At midnight the dilatation of the os uteri being nearly completed, I passed up the hand into the uterus, and finding a shoulder presenting, brought down both feet, turned, and extracted the child in a very short space of time, and without any force being used, the external parts offering no resistance. But the cord was without pulsation, and all our efforts to excite respiration were fruitless. The death of the foetus, as Mauriceau states, is probably the cause of many cases of arm presentation, but in this and others here related, the child was alive when the hand was introduced into the uterus. I feel wholly unable to explain the cause of preternatural presentation occurring repeatedly in the same individuals, as described by Dr. Denman and other systematic authors.

(CASE 220.) 2nd August, 1836. James-street, Oxford-street. The left arm, and a large portion of the funis, which did not pulsate, in the vagina. Liquor amnii gone. Os uteri dilatable. Pains feeble. Labour had continued twelve hours. The right hand was passed up without difficulty between the front of the pelvis

and foetus, the feet grasped, and the turning safely effected.

(CASE 221.) On the 4th August, 1836, I was called several miles from London, to a case of labour, in which the left arm presented. The membranes had been ruptured, and the liquor amnii discharged many hours, and the uterus was firmly contracted around the body of the child, which was premature and dead. Strong efforts had been made to turn, but the os uteri was rigid, and only partially dilated, and the shoulder and thorax squeezed so firmly into the brim, that it was found impossible to pass the hand into the uterus, without the greatest danger of laceration. Instead of forcing the hand into the uterus, I laid hold of the arm and pulled it down as low as possible, with the view of making the child pass doubled up, through the pelvis ; and to assist in this, the fingers of the left hand were carried as far as possible over the abdomen, towards the pelvis. With moderate traction upon the arm and trunk, the child came forth, precisely as in cases of spontaneous evolution. The child was in a very putrid state, and the patient died after from uterine peritonitis and phlebitis.

(CASE 222.) On the 3rd November, 1836, Mr. Morley, of Cavendish-street, called me to assist him in delivering a lady under his care. The presenting part could not be ascertained for a long time after the labour began. When the membranes gave way, a large portion of the umbilical cord came through the os uteri into the vagina, and did not pulsate. The left arm was soon after felt at the os uteri, and repeated attempts made to pass the hand along it into the cavity of the uterus to turn, but it was contracting so vigorously that the hand could not pass. Venesection was performed, and a starch and laudanum glyster administered ; but the pains increased, and the shoulder and arm continued to descend lower and lower ; and when I saw the patient the left arm was hanging completely out of the external

parts. The back of the foetus was to the front of the pelvis, and the trunk pressed into the brim. I expected to find the nates of the child to the left side of the mother. I first tried to turn with the left hand passed up between the front of the pelvis and the presenting part ; but the pressure of the uterus was so great that it was soon removed, being powerless, and the right introduced in its place, which was also in no long time obliged to be withdrawn. The left hand having recovered from the effects of the pressure, was again slid up between the front of the pelvis and foetus, and without much difficulty passed high up into the uterus. and a foot seized and brought down, and the operation of turning completed with safety. The cord was twice round the neck and once round the trunk. The cuticle was peeling off the child.

(CASE 223.) On the 14th November, 1836, I was requested by Dr. Jewel to assist him in delivering a woman residing in Princes-court, Whitcomb-street. Labour began at five in the afternoon, with sudden rupture of the membranes, and escape of the whole liquor amnii. Soon after, the left arm was found hanging out of the external parts, and the right in the upper part of the vagina. After the exhibition of a large dose of laudanum, several strong efforts were made to bring down the feet, but the uterus was so closely contracted around the child that the hand could not be introduced. At one in the morning, I found the left arm of the child greatly swollen and cold, hanging out of the vagina, and the right in the upper part, not half the size of the other. At first I tried to deliver by passing up my left hand between the child and the sacrum, and back part of the uterus. I soon found that it would be impossible to reach the feet in this direction, and the left hand was withdrawn, and the right passed up between the front of the pelvis and the thorax of the child, and without much difficulty I succeeded in bringing down a foot. I fixed a tape around the ankle, and by pulling gently

upon it, and at the same time pressing back the left shoulder, the child went round, and the nates and other parts were easily extracted. Since the occurrence of this case, and even before this, I have felt persuaded whatever arm might present, and whatever the position of the foetus in utero might be, with few exceptions, that the best plan is to employ the right hand in the operation of turning, and to pass it into the uterus between the front of the pelvis, where it is shallow, and the presenting part of the child. When the right hand is overcome, and rendered useless by the pressure of the uterus, it may be withdrawn, and the left introduced, and thus, by the alternate use of the hands, the delivery, in some difficult cases, may with safety be completed, which would otherwise completely baffle any single individual, however dexterous and powerful.

(CASE 224.) On the 19th November, 1837, I was again called to deliver this patient. The labour began the morning before with rupture of the membranes, and the gradual escape of a large quantity of liquor amnii. During the day the os uteri was not dilated, and there was no pain. A dose of castor oil was given in the evening, but the labour-pains did not commence till the following day, and I did not see her till five in the afternoon. There was then a loop of the umbilical cord pulsating within the orifice of the uterus, which was largely dilated. A foot also could be felt. There was no pain. Having waited a short time to see if the uterus would contract and expel the nates, and this not taking place, I took hold of the foot, drew it down, and very speedily, and with very little force, extracted the child, but it was dead, though the cord had been pulsating when I began to draw down the foot. If the pressure upon the cord was here sufficient to interrupt the circulation, how much greater must it be in every case where turning is performed for prolapsus of the funis,—a practice which must generally be considered unjustifiable.

(CASE 225.) On the 8th November, 1839, I was

called a third time to deliver this woman ; the left arm presenting. The membranes had burst suddenly a short time before I saw her, and the arm had at once come down into the vagina. The os uteri was fully dilated, and the parts not rigid, so that the operation of turning was performed under very favourable circumstances, yet the child was dead. Mrs. Findley, the midwife, informed me that this woman had been delivered of eight children, and that only one of them was born alive. All the presentations had been preternatural.

(CASE 226.) On the 24th May, 1837, in Devonshire Mews, I saw a case of labour, in which the right arm was hanging out of the vagina, with a large portion of the umbilical cord, not pulsating. Several strong efforts had been made to turn without success, in consequence of the violence of the uterine contractions. I passed up my right hand towards the left side of the fundus uteri, believing I shonld find the legs there, and soon brought one of them into the vagina, and put a tape round the ankle and held it there while the other hand was passed up to the knee and thigh, and the proper traction made on them to bring down the nates. This was the fourth time the patient had been delivered, and every time the presentation was preternatural. On this occasion, the labour commenced on the 22nd May, and lasted the whole of the 23rd. The presenting part could not be felt till three A. M. of the 24th, when the membranes burst, and an arm and the funis came down.

On the 15th June, 1837, I was called to a young woman near the end of the ninth month of her first pregnancy, to perform the operation of turning. Labour had not commenced, but the rectum was greatly distended with indurated faeces, which were removed by enemata and castor oil. The labour took place on the 17th, and the presentation was natural.

(CASE 227.) Saturday, 23rd of December, 1837, I was requested by Dr. H. Davies to see a short, deformed woman, who had been in labour during the greater part of the preceding day. The left arm presented, and at midnight, Dr. Davies had attempted, but unsuccessfully, to deliver by turning the child. At three in the morning, I made several strong efforts to pass my hand into the uterus, and bring down the feet, but the uterus everywhere embraced the child so firmly, that I could not pass the hand either between the symphysis pubis and shoulder, or along the hollow of the sacrum. Dr. Davies made another attempt to deliver at four A. M., but it was also unsuccessful. A large opiate was administered, but venesection was not employed, on account of the feeble condition of the woman. At eleven A. M. another attempt was made to deliver, but the hand could not be introduced into the uterus, and we resolved to remove the arm at the shoulder-joint, perforate the thorax, and bring down the pelvis of the child with the crotchet, or bring the foetus doubled up through the pelvis of the mother. The arm was then dragged down, and removed at the shoulder-joint, and immediately after, the thorax receded almost beyond the reach of the finger, and the orifice of the uterus contracted, so that it was difficult to fix the crotchet on any part of the child. Another effort was now made to turn, but it was found to be impossible to introduce the hand within the uterus. I then passed up the left hand into the pelvis, and insinuated two fingers within the uterus, and along these conducted the crotchet to the ribs of the child, and fixed its point, as I thought, near the lower part of the thorax, and pulled forcibly down. After much exertion, the thorax being greatly torn, and all the parts in a confused state, when I was engaged in making strong traction, the trunk separated from the head, and passed through the outlet of the pelvis. The left hand was immediately

passed into the uterus, two fingers were introduced into the mouth, so as to keep the head steady, and the crotchet was introduced, and its point fixed on some part of the face. Without much difficulty the head was extracted. She died two days after from laceration of the muscular and internal coats of the uterus on the anterior part. Moderate venesection, large opiates, and delaying to deliver till the uterus had ceased to resist the introduction of the hand, and had this delay extended to twenty-four hours, would have been better practice, I feel persuaded, than that which we pursued.

(CASE 228.) A case of twins occurred in Moor-street, on the 18th January, 1838. The first was delivered at seven P. M. The left arm of the second presented, but the proper time for turning was allowed to pass away, and the uterus again soon began to act with great energy, and the liquor amnii escaped, and the arm and shoulder were quickly thrust down to the outlet. In the efforts then made to turn, the right arm of the child also came into the vagina, and at nine P. M., when I first saw the case, both arms were protruding, and the uterus still acting powerfully. I experienced great difficulty in passing the hand into the uterus to grasp the feet, and after I had done this, as much difficulty in pushing the thorax out of the brim of the pelvis, to allow the nates to enter. But by persevering, it was at last accomplished without any injury being inflicted upon the mother.

(CASE 229.) 6th November, 1838, I was called to deliver a woman in the lying-in ward of the St. Marylebone Infirmary, in whom the left arm was hanging out of the vagina, and the shoulder strongly impacted in the brim. It was the first child. Long and vigorous efforts had been made by Mr. Clay to deliver by turning, but his hand never reached one of the lower extremities. I found the os uteri dilated, the whole liquor amnii discharged, and the uterus firmly contract-

ing upon the child. I got my right hand between the shoulder and uterus on the anterior part, and touched a knee with the points of the fingers, but could not take hold of it. The hand soon lost all power to take hold of anything, and was withdrawn. The left was slowly and very gently passed up, and almost as if by stealth, and the uterus allowed this to proceed much higher than the other, without being roused to contraction. The left foot of the child was brought down into the vagina, and a tape put around the ankle; by the help of this I was able to draw down the nates, while I pressed the shoulder out of the way. In an hour the delivery was safely accomplished, though not without some danger to the perineum. The child exceeded much the ordinary size. The great advantage of employing the left hand when the right is rendered powerless by the pressure of the uterus, arises partly from the circumstance that the resistance can be much more slowly and safely overcome. The uterus seems to yield to the long-continued gentle force of the hands employed in succession, when it would not to one forced up more quickly.

(CASE 230.) Mrs. F——, first labour, 24th May, 1839, Oxford-street. Nine hours after the pains began, her medical attendant discovered that the presentation was preternatural. I found a foot and hand in the vagina. I drew down a foot, then the other foot, and extracted the nates, trunk, and superior extremities, but the head would not pass, from the rigid state of the perineum. If the head had been suddenly extracted, the perineum must have been torn, and the child's neck dislocated. For a very considerable time, probably half an hour or longer, the edge of the perineum was held back so as to allow the air to enter the mouth and lungs, and had this not been done, the child must have died before the head was born. The pulsation of the cord had entirely ceased, but the heart had never

ceased to beat. By dashing cold water over the face, the child began to cry, and lived. The head of the second child presented, and having applied the binder, and ruptured the second set of membranes, its expulsion was left to nature. Pains soon came on, and it was expelled alive, and the placentæ were detached and expelled in no long time without any hemorrhage. Where the head of the second child presents in cases of prolapsus of the funis, this is the practice which ought to be adopted, at least in the first instance, and it generally succeeds. In Case 248, the second set of membranes had been allowed to remain long entire after the birth of the first child, and all this time the uterus was perfectly quiet, but in a few minutes after I had discharged the liquor amnii, strong pains began, and the child was soon born alive. If the uterus should not act within an hour or more after this has been done, turning would probably be upon the whole the best practice, but my experience does not enable me to speak confidently on this point, as I have seen so few cases in which it has been necessary.

(CASE 231.) Mr. Stodart, of Golden-square, requested me to assist him with a labour on the 5th March, 1839, in which the right arm of the foetus presented, and a large portion of the funis, without pulsation, was in the vagina. The os uteri was widely dilated, and the pains were not very strong or frequent. I passed up the right hand between the symphysis pubis and body of the child, and reached a foot, but the uterus then began to contract with such vehemence that it was impossible to bear the pressure, and the pain endured could not have been greater had it been squeezed in a vice. I withdrew it, and when it had recovered again passed it forward, and laid hold of the foot and brought it down, and gradually effected the turning. No bad symptom followed.

(CASE 232.) At two p. m., on the 18th December,

1839, in a case of labour at the British Lying-in Hospital, the left arm presented, and was hanging out of the vagina. The uterus was not acting very strongly, yet it was firmly contracted upon the child. The labour had been going on all the preceding night, and the presenting part was not ascertained. I passed up my right hand, and soon reached a knee, but the uterus squeezed my hand so firmly that I was forced to withdraw it, and tried to use the left, but it was impossible to reach the knee with this. The right was again passed in, and the knee brought down, but with difficulty. After the leg was in the vagina, considerable time and force were necessary to bring the nates into the pelvis, though the presenting part was pushed aside as much as possible. Great assistance was obtained in doing this from a strong tape put around the ankle, which enabled me to hold the leg firmly in the vagina, while the right was passed up to seize and pull down the thigh.

(CASE 233.) Mr. Jonson, of Grosvenor-street West, requested me in April, 1841, to see a case of labour in which the arm presented. The first stage was tedious, and for a time the presentation could not be determined. When the os uteri was dilated to the size of a crown, and thin, the membranes being unruptured, a hand was distinctly felt presenting. There could be no doubt about the propriety of turning the child before the membranes gave way, which they would in all probability soon have done. The operation was performed with the greatest care, and without the employment of much force, by Mr. Jonson, and the child was born alive, and has lived. Inflammation of the uterus however supervened, and at different times discharges of pus have taken place from the cavity, and it is now extremely doubtful if the patient will ever regain her health. A more favourable case for the operation of turning never occurred, nor could it have been more skilfully performed, and yet the consequences were most

injurious to the mother. I consider it impossible in any case to perform the operation of turning without more or less danger to the mother, and that it ought not to be had recourse to without necessity.

(CASE 234.) 16th August, 1841, at four A. M., —, æt. twenty-two, first child, twenty hours in labour, under the care of Mr. Harper. Membranes ruptured and liquor amnii gone. Right arm in the vagina, os uteri dilated, uterus not contracting very strongly. Many strong efforts had been made to turn. I passed my right hand up slowly along the arm and shoulder in the front of the pelvis, and turned without much difficulty, but the child was dead.

(CASE 235.) On the 24th November, 1841, Mr. Owen, Holborn, met with a case in which the right arm presented, and the liquor amnii had escaped at the very commencement of labour. I found the right arm in the vagina, the os uteri dilated, the uterus firmly contracted around the child, but not acting strongly. I passed the right hand very cautiously between the front of the pelvis and shoulder, and soon seized the feet, and turned. Both these patients recovered favourably.

(CASE 236.) 14th October, 1840, with Dr. Boyd and Mr. Graves. I saw a case, S. M. I., in which the head and hand presented, and it seemed probable the head would never enter the brim. I introduced my whole hand into the vagina, and in the absence of pain, pushed the hand into the uterus with my fingers, and held it there till another pain came on, and the head occupied the brim. The child was soon born alive.

(CASE 237.) 19th January, 1842, Lisson-street, Paddington; second child. The left arm and shoulder forced into the brim, os uteri not fully dilated, but thin and yielding. No labour pains, yet the uterus firmly contracted around the child; the liquor amnii gone four days. Child dead. Mr. Fitzherbert and Mr. Stoddart had endeavoured to turn. I passed my right hand into the uterus on the fore-part, but was soon compelled

to withdraw it, without reaching a foot, so violent was the pressure. The left was then passed, and with little force a foot was taken hold of and brought down, and the turning safely completed. But the placenta adhered with unusual firmness, and at the end of an hour we were obliged to remove it. During the labour the breathing was observed to be unusually laborious, and in two days after delivery, she was seized with hemorrhage from the nose and mouth, which returned at intervals for some days, till she sank. Not allowed to be examined after death.

(CASE 238.) Mr. L—— was called to a case of labour in Sherrard-place at four A. M., 2nd August, 1842. The pains were not strong till the middle of the day. At five they were strong and regular, and it was ascertained that the presentation was preternatural. A hand was passed up into the uterus, and a foot brought down into the vagina ; and from six till eleven at night, an arm and foot, and a portion of the funis, were in the vagina together. During this time there had been little pain, and no effort made to complete the turning, an expectation having been entertained that when the pains returned, nature would change the position of the child. I found the right arm at the orifice of the vagina, and the shoulder in the brim, and the foot hanging out of the os uteri into the upper part of the vagina. It was impossible to draw down this foot so low as to pass a tape around the ankle. I brought down the other foot with a good deal of difficulty, and having possession of both legs, the turning was soon completed. Wherever it is possible to bring down both feet in turning, it should always be done, as it renders the operation much easier. Sometimes one hip only descends at first through the superior aperture of the pelvis, and this renders it difficult, before the membranes are ruptured, to distinguish this part from the head, and very often it is not accurately ascertained before the membranes are ruptured. Then the meco-

nium usually escapes, and the genital organs and anus, and the fissure between the nates, are felt. In most cases the nates pass through the pelvis, and nothing is required but to support the perineum; where the pelvis is small, and the child large and unfavourably situated, the natural efforts may be insufficient to expel the child either alive or dead. A finger should be passed up over one of the groins, and extracting force employed, or a silk hankerchief may be passed between the thigh and abdomen, and the nates drawn down. Where these means fail, and there is no hope of preserving the child, the blunt hook may be used. The superior extremities and head require to be extracted carefully and without much loss of time, when the cord pulsates, and this cannot well be done unless the face is made to correspond with the hollow of the sacrum. The difficulty of delivering in the following case chiefly arose from rigidity of the perineum.

(CASE 239.) At two P. M., 17th December, 1832, I was requested by Mr. Skair to see a case of nates presentation. He had extracted the trunk and extremities, but the head could not be drawn through the external parts from the rigid state of the perineum, and the pulsations of the cord were becoming more and more feeble. So great was the resistance of the perineum, that it was impossible to overcome it without destroying the child. I pressed back its edge, however, so far that the external air could enter the mouth of the child, and it respiration in this way fully twenty minutes after the pulsations of the cord had ceased. In spite of all our care, the edge of the perineum gave way as the bulky part of the head passed through the external parts, but the child sustained no injury, and continued to live. This method I have employed successfully in other cases.

(CASE 240.) On the morning of Tuesday, April 22nd, 1836, I was called to a patient twenty years of age, who had been many hours in labour with her first child. The

nates of the child presented, but could not be forced through the brim. With a blunt hook passed over one of the groins, the medical attendant succeeded, after employing great force, in bringing down the extremities and trunk through the pelvis. The head, however, remained immovably fixed above the brim, after repeated unsuccessful attempts to open it with the perforator, and being exhausted by efforts, continued for three hours, to extract the head, he requested me to assist in completing the delivery. I found the occiput at the back part of the pelvis, and the chin over the symphysis pubis, and the anterior surface of the thorax and abdomen twisted round towards the hollow of the sacrum. The perforator had been passed up behind the symphysis pubis, and had entered the neck of the foetus near the angle of the jaw, and lacerated the parts around, but the point had not passed through the bones of the skull. I turned the body of the child round, so as to make the front of the thorax and abdomen look toward the symphysis pubis, and correspond with the face of the child. The fore and middle fingers of the left hand were then carried up along the spine of the child to the occiput, and the point of the perforator being slid along the inside of these, while the body of the child was drawn forward, the head was opened behind the right ear, and the brain began to escape. The point of the crotchet being then introduced through the opening, and fixed on the base of the skull, the head was soon extracted. The child was putrid, and the patient died on the 28th from extensive inflammation of the uterine organs and cellular membrane of the pelvis. The brim of the pelvis is of an oval form, and measures three inches from the sacrum to the symphysis pubis, and four inches and a half in the transverse diameter. The distance between the tuberosities of the ischia is three and a quarter. The false vertebræ are not completely united by bone, and the ossification of the other bones of the pelvis is im-

perfect. In this case all the consequences of distortion were produced, though it was merely a small pelvis, and had no apparent connexion with softening of the other bones of the body from rickets. The bones of the extremities were not bent, and there was no external appearance from which the actual condition of the pelvis could have been known before the labour commenced.

(CASE 241.) I attended a lady in her first labour on the 22nd October, 1837. The nates presented, and the cord ceased to pulsate, after the trunk and extremities of the child had been extracted. The perineum was so rigid, that the head could not have been delivered without using so much force that the parts must have been torn, and the neck of the child injured. I held the body of the child as far forward as possible, while Dr. H. Davies assisted me in holding back the perineum, that the air might enter the mouth of the child. The respiration went on for nearly half an hour before the head could be safely drawn into the world, and during the whole of the time there was no pulsation in the cord. The child is alive, and the perineum was not injured. On the third day after delivery, this lady was attacked with scarlet fever in a severe form, but she recovered completely.

(CASE 242.) On the 13th December, 1838, Mr. Marshall, of Greek-street, called me to a case in which the nates presented or one of the feet. After the trunk and extremities had been extracted, Mr. Marshall could not get the head through the brim of the pelvis. I found the head so firmly fixed in the brim, that I could not succeed by all the force I could exert in drawing it into the cavity. As the child was dead, I passed up the perforator, and opened the head behind the ear, and then it was readily drawn through with the crotchet. Recovered.

(CASE 243.) February 22nd, 1842, I saw a lady who had been thirty-six hours in her first labour. The os

uteri was widely dilated. Foot and nates presented. The expulsion of the nates was left to nature ; the upper extremities and head were extracted artificially by the medical attendant. The perineum was slightly torn. Child dead. It had been alive in the early part of the labour.

(CASE 244.) At one A. M., on the 8th January, 1842, Mr. Thompson called me to a case in Vere-street, in which the trunk and extremities of the child were delivered, but the head could not be drawn through the brim, which was contracted. The child being dead, I opened the head behind the ear, and putting the crotchet in the opening, easily extracted the head. The nates presented, and venesection had been performed in the first stage to relieve the rigidity of the os uteri.

(CASE 245.) On the 1st June, 1840, I was called to a case of twins, in which the face and funis of the first child presented, and the feet of the second. The labour being very protracted, the head of the first had been perforated, but could not be extracted. At nine in the evening, I first saw the case, and had some difficulty in delivering the head with the crotchet. The feet of the second presented, and I left the management of this to the gentleman in attendance. At five the next morning, I was again called to this case : the trunk and extremities had been delivered, but the head remained above the brim of the pelvis, though great and long continued efforts had been made to extract it. By passing two fingers into the mouth, and pulling down the chin, the difficulty was readily overcome.

(CASE 246.) June, 1839, a lady who had suffered severely from distension of the uterus, and dropsy of the lower extremities in the latter month of pregnancy, was delivered of twins. The head of the first presented with the cord round the neck. The head of the second likewise presented, and the binder being applied, and the membranes ruptured, it was soon expelled by the natural efforts : both were alive. Before

the placenta came away, profuse hemorrhage followed, which had nearly proved fatal in spite of every thing. For a few days she seemed to recover, but the pulse became very frequent, the head wandered, and she died nine days after, from some affection of the uterine veins. After delivery the peristaltic action of the intestines was distinctly seen through the abdominal parieties.

(CASE 247.) On April 7th, 1840, I was called by Mr. Skegg, St. Martin's-place, to a case of twins. The first child presented naturally, and had been expelled eight hours before I saw the patient. Eight scruples of the ergot of rye had been given, but no strong pains followed. The head of the second child presented, and the membranes were not ruptured. I discharged the liquor amnii, applied the binder, and gave stimulants to make the uterus contract, which it did, and expelled the child in three hours. The vagina and cervix uteri were too much contracted in this case to admit of turning, which I would not have had recourse to, if they had been in a state of relaxation. The placentæ were retained, and dangerous hemorrhage took place, but the patient recovered rapidly. In this case, as soon as it was ascertained that the head of the second child presented, the binder should have been firmly applied, and the membranes ruptured. No benefit can arise from delaying to do this in similar cases.

(CASE 248.) May 25, 1842, the head of the first child presented, and it was expelled alive at eight A. M. The midwife soon discovered that there was a second child, but she did nothing for five hours. She then sent for an accoucheur, who introduced his hand as far as the wrist, and felt the head of the second child presenting, and did nothing more. There was no pain all this time. At twelve o'clock at night he returned, and found the midwife with the patient in the same condition. Her pulse being good, and spirits also, he told the midwife to remain with her, and let him know the result in the morning. At nine A. M. every thing re-

mained as before, and he then requested me to say how long she ought to be left to nature. I thought she had been left twenty-four hours too long, and immediately went and ruptured the membranes, and did every thing in my power to make the uterus contract, which it soon did most powerfully, and a living child was expelled, and the placenta followed without hemorrhage. I can see no necessity for waiting more than an hour, or even so long, before rupturing the second bag of membranes.

(CASE 249.) At midnight, 21st June, 1842, Mr. F— requested me to assist him with a case of twins. The presentation of the first was natural, and it was born without help. The arm of the second presented, and two hours had elapsed from the birth of the first before I saw the patient. The left arm was in the vagina, and the head to the left side of the uterus. I passed up the right hand between the child and fore part of the vagina and uterus, and soon laid hold of a leg, and turned and delivered with great ease, and the child was alive. The binder was firmly applied, and every other means had recourse to which could prevent hemorrhage.

(CASE 250.) November 20th, 1838, the first child expelled, dead, and in a putrid state. The nates presented. Four hours after the second was born alive, the hand having come along with the head. Great hemorrhage followed, which was arrested by the removal of the placenta, the firm application of the binder, the dashing of cold water on the external parts, and internal stimulants. The placenta of the first child was in a yellow indurated state, with masses of coagulated blood contained in various parts of its interstices. The placenta of the living child was healthy. The ergot of rye was given in this case, but had no effect.

(CASE 251.) Several years ago, I saw a case of twins with Mr. Webster, of Connaught-terrace. During the latter months, the secretion of urine was scanty and albuminous, and diuretics had no effect upon the kid-

neys. Great œdema of the legs, thighs, and labia, took place, with urgent dyspnœa. Blood-letting, cathartics, and diuretics were employed without any improvement, and when the symptoms became so urgent as to render delivery necessary, labour came on spontaneously, and twins were expelled. The kidneys began to secrete urine copiously within twenty-four hours, and in no long time the whole dropsical fluid effused had been removed. Another similar case has fallen under my observation.

(CASE 252.) July 5th, 1828, at Brompton, I saw a case of protracted labour, in which the head presented, with a large portion of the funis, which did not pulsate. The pains were feeble, and she seemed much exhausted, but before the arrival of the perforator, the child was expelled.

(CASE 253.) October 26, 1828. A case occurred at 23, Peter-street. The head of the child was low down in the pelvis, and a large portion of the funis hanging out of the external parts, and pulsating. The case was left to nature, and the child was born alive, which I did not expect.

(CASE 254.) On the 2nd November, 1838, Mr. Fincham, Spring-gardens, called me to see a case of labour, in which a great portion of the funis was prolapsed, and had not ceased to pulsate. The head was entirely above the brim, the os uteri not fully dilated. The membranes burst two hours before, and for some time feeble pulsations were felt in the cord. When I saw the case, it was too late to think of turning, and had I seen it two hours before, soon after the membranes had given way, I would also have decided to leave the case to nature. In prolapsus of the funis there are few cases, if any, in which it is right to turn, and none after the liquor amnii has escaped, and where we have reason to believe that any considerable difficulty will be experienced in the operation.

(CASE 255.) On the 5th May, 1841, I saw a case

of labour in which the cord was twice round the neck, and the trunk could not be delivered till the cord had been tied and divided in the vagina.

(CASE 256.) In a case of labour, the first stage was nearly completed before I could ascertain the nature of the presentation. I dreaded, from this circumstance, that the child was lying across the uterus, and that the operation of turning would be necessary. I called Dr. H. Davies into consultation, and he was of the same opinion, and considered it proper to interfere before the membranes gave way. I placed the patient on the left side, near the edge of the bed, laid bare the right arm, covered the hand with lard, and passed it slowly in a conical form into the vagina, and in the absence of pain through the os uteri. I was pleased to find that the head was the presenting part, and that turning was not necessary. On rupturing the membranes, the uterus soon contracted and expelled the child alive. The cord was twice firmly twisted around the neck.

(CASE 257.) In another private patient, the same circumstance occurred, not long after, and similar preparations were unnecessarily made for turning. The cord was twice around the neck.

(CASE 258.) On the 1st June, 1842, at midday, I saw a case at 12, Buckingham-place, Fitzroy-square, in which the head, the funis, and foot presented. Labour began the previous afternoon, and at six o'clock the liquor amnii escaped, and the midwife felt the head, a foot, and a great loop of the funis presenting. She thought "the foot should be put back," and this she attempted to do for six hours. At midnight she requested a surgeon to see the case, and deliver the woman, but he did nothing except administer two doses of ergot of rye. In this condition the patient remained till twelve o'clock the next day, when I saw her. As there was no pulsation in the cord, the only matter for consideration was how the patient might be relieved

with the least risk. I passed up my hand into the vagina, grasped the foot, and brought down the nates, while at the same time I pushed the head aside and easily delivered.

(CASE 259.) At two A.M., 8th September, 1842, Mr. Crellin called me to a case at Portland Town, in which the left arm and funis, without pulsation, presented. The liquor amnii had escaped forty-eight hours before, and Mr. Crellin then found the os uteri so rigid, that turning was impossible. I passed up my right hand between the front of the pelvis and the foetus, along the arm, shoulder, and trunk, till I reached a foot, but the uterus was grasping the child so firmly, that I had great difficulty in seizing the foot and bringing it into the vagina ; and when this had been done, still greater difficulty in getting the shoulder out of the brim, and the nates into it. Even after a tape had been put round the ankle, and long and strong traction made upon the thigh, the version could not be completed, till the left hand was passed up into the uterus, and the other foot brought down. The patient is recovering favourably.

## FIFTH REPORT.

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### ON THE CAUSES AND TREATMENT OF UTERINE HEMORRHAGE, IN THE LATTER MONTHS OF PREG- NANCY, AND THE HISTORIES OF THIRTY-SIX CASES OF PLACENTAL PRESENTATION.

THE placenta may adhere to any part of the inner surface of the uterus, and flooding never takes place during pregnancy, unless the placenta has been separated from the uterus. When the connexion between them is destroyed, blood flows from the open arteries in the lining membrane of the uterus, and from the great semilunar shaped openings in the veins, until the uterus contracts, and coagula of the fibrine are formed. The contractions of the uterus, and the formation of clots within its cavity, and in the orifices of the arteries and veins of the uterus, after the separation of the placenta, are the principal means employed by nature for arresting the flow of blood. The semi-lunar or valvular-like edges of the veins at their termination in the inner surface of the uterus, are well adapted to ensure the effect of arresting the current of blood through these passages by the contraction of the fibres with which they are everywhere surrounded. All the different efficient means which have been recommended for checking the discharge in uterine hemorrhage, operate either by exciting contraction of the uterus, or by promoting the coagulation of the blood itself.

within the vessels. The placenta is most frequently attached to the upper and posterior part of the uterus, but in some cases it adheres to the circumference of the internal orifice, and from this peculiar situation of the placenta, arises one of the most dangerous varieties of flooding in the latter months of gestation.

In 1609, Guillemeau stated that the placenta sometimes presents or comes before the child, that this gives rise to a dangerous hemorrhage which nature is unable to suppress, and that the most safe and expedient means of arresting it, is to deliver immediately by passing up the hand into the uterus and turning the child. He has made no observation from which it can be inferred that he believed the placenta to have been originally adherent to the upper part of the uterus, and to have descended from thence to the cervix. This was an erroneous hypothetical opinion adopted by Daventer at a much later period. In those cases of uterine hemorrhage in which the placenta did not present, but had been detached from the fundus uteri, Guillemeau had likewise recourse to artificial delivery, and for the knowledge of this practice he states that he was indebted to Ambrose Paré. The symptoms and treatment of cases of placental presentation were accurately described by Mauriceau, and in all cases of hemorrhage from this cause he recommends immediate delivery. He has related seventeen cases of uterine hemorrhage in the latter months of pregnancy from presentation of the placenta, and in sixteen of these delivery was accomplished artificially by passing the hand through the opening formed by the separation of the placenta from the uterus, rupturing the membranes, and turning the child. Two women died after this operation, and one who would not consent to have it performed died undelivered. Mauriceau has likewise recorded the histories of thirty-seven cases of uterine hemorrhage, in which the placenta did not present, but had adhered to the upper part of the uterus, and been afterwards detached. Twenty-one of these cases oc-

curred before 1682, and in most of them he delivered artificially by turning the child, as he had done in the sixteen cases of placental presentation, and as Paré and Guillemeau were accustomed to do in all cases of flooding in the latter months of pregnancy. On the 9th June, 1682, he says, "I delivered a young woman in the eighth month of pregnancy who had uterine hemorrhage caused by a violent fall upon the knees four days before. During her whole labour, she had only slight pains in the abdomen which produced no effect. As the hemorrhage was moderate, and the uterus was gradually dilating, I committed the labour to nature, contenting myself with rupturing the membranes of the child." There is no account given of the circumstances which induced him to make this important change in the treatment of cases in which the placenta did not present, and to adopt that improved method of treatment which was at a later period so strongly recommended by Puzos, and considered by him as his own discovery. In eight cases, Mauriceau ruptured the membranes and left the labour to nature with the happiest results. He recommends the same practice when hemorrhage occurs in the first stage of labour.

Portal's Treatise, 1685, contains an account of eight cases of uterine hemorrhage, in which he found the placenta not merely at the mouth of the womb, but adhering to the whole neck of the uterus. In several of these cases he felt the placenta adhering all round to the internal orifice of the uterus. In the account of his sixty-ninth case he says "*Je sentis l'arriere faix, qui se presentoit, et qui estoit fort adherant, et attaché à l'orifice de la matrice de toutes parts.*" In the histories of all the other cases the same circumstance is expressly stated. In those cases the treatment employed by Portal did not differ from that which had been employed by Paré, Guillemeau, and Mauriceau, the propriety of artificial delivery by turning being then as completely established as at the present time, and the important

fact demonstrated that the hemorrhage is produced by the placenta adhering to the neck of the uterus. Petit, Giffard, Ræderer, Smellie, Levret, and W. Hunter, were all well acquainted with the fact, and deduced from it the correct practical inferences deduced from it. Dr. Rigby states that "Giffard has more than twenty cases where the placenta was found at the os uteri, but he plainly supposes that it had not been originally fixed there, for he says, "It is customary in floodings to find the placenta sunk down to the mouth of the womb." "I beg leave," says Giffard, "in the history of his last case of uterine haemorrhage, (1731,) before I proceed to give any further account of the delivery, to give my opinion in a point of midwifery in which I differ from most authors that have wrote on the subject. It is generally believed that the ovum, after its impregnation and separation from the ovary, and its passage through the tuba Fallopiana always adheres and is fixed after some time to the fundus uteri; in this case the placenta adhered, and was fixed close to and round about the cervix uteri, as I have found it in many other cases, so that upon a dilatation of the os uteri a separation has always followed, and hence a flooding naturally ensues." "When I had passed my whole hand into the uterus, I found the placenta adhering all round the os internum, so that I was forced to separate it on one side to reach the membranes, which I tore." "The edge or middle of the placenta," says Smellie, "sometimes adheres over the inside of the os internum, which frequently begins to open several weeks before the full time, and if this be the case, a flooding begins at the same time, and seldom ceases entirely until the woman is delivered. The discharge may indeed be terminated by coagulums that stop up the passage; but when these are removed it returns with its former violence, and demands the same treatment that is recommended above." "If in time of flooding," he adds, "she is seized with labour-pains, or if by every now and then stretch-

ing with your fingers the os internum, you bring on labour, by which either the membranes or head of the child is pushed down, and opens the os internum, the membranes ought to be broke, so that some of the waters may be discharged, and the uterus may contract and squeeze down the foetus. This may be done sooner in those women who have had children formerly, than in such as have not been in labour before. If, notwithstanding this expedient, the flooding still continues, and the child is not like to be soon delivered, it must be turned immediately ; or if the head is in the pelvis, delivered with the forceps ; but if neither of these two methods will succeed, on account of the narrowness of the pelvis or the bigness of the head, this last must be opened and delivered with the crotchet. In all these cases let the parts be dilated slowly, and by intervals, in order to prevent laceration." These are the most clear, concise, and accurate rules which have been laid down by any author, for the treatment of hemorrhage in the latter months of pregnancy, and in the first stage of labour, and the following cases may help to illustrate the manner in which they ought to be applied ; first, where the placenta adheres to the cervix uteri, and secondly, where it has adhered to, and been detached from, the fundus.

#### I. CASES OF PLACENTAL PRESENTATION.

(CASE 260.) Anne Cromer, æt. forty-two, July 22nd, 1828. St. James's parochial infirmary. Mr. Baker called me to see this patient, who was far advanced in pregnancy, and had been attacked with profuse uterine hemorrhage a week or ten days before. The placenta was felt adhering to the neck of the uterus, but the orifice was so rigid and undilated that turning could not be performed. For several days a plug was kept in the vagina, but a large quantity of blood was lost before the os uteri was in a condition to allow the hand to be passed. The delivery was at last accomplished without

the use of much force, but a great discharge of blood took place before the uterus could be emptied, and the most alarming exhaustion followed. Until the 2nd of August she suffered from headache, intolerance of light, dyspnœa, and fever ; afterwards pain in the chest, increased dyspnœa, with purulent and fetid expectoration, took place, and she died on the eighteenth day after delivery without ever having complained of pain in the abdomen. On inspecting the body we found the effects of extensive inflammation of the pleura on the left side, and a portion of the left inferior lobe of the lung in a state of perfect gangrene. On opening the abdomen, there was no diseased appearance visible in the sac of the peritoneum, and the uterus was reduced in size as much as it usually is three weeks after delivery. Mr. Baker concluded that the uterus was perfectly healthy, and had nothing to do with the gangrene of the lungs. A case of uterine phlebitis which I had observed some time before, led me to suspect that the source of the mischief existed in the uterus, and I proceeded to examine it. Pus flowed from one of the veins of the upper part of the uterus on the left-side, when cut open, and this inflamed vein was traced to an abscess in the left ovary, and to the left spermatic vein, the coats of which were contracted and thickened, and its inner surface lined with lymph. The whole spermatic vein was inflamed, from the uterus to its junction with the left renal vein, the coats of which were also thickened and lined with lymph. From this case it appeared that hemorrhage was not the only danger to be apprehended where the placenta adhered to the neck of the uterus.

(CASE 261.) A patient of the British Lying-in Hospital, near the full period of pregnancy, was suddenly attacked with a profuse discharge of blood from the uterus. She had been exposed to no accident, and had not experienced any uneasy sensation about the uterus, before the blood began to flow. She was conveyed from her residence to the hospital immediately after the oc-

currence, but she was dead before any of the medical officers of the institution could see her. I examined the body, and found the centre of the placenta over the centre of the internal orifice of the neck of the uterus. On the left side, the connexion between the placenta and uterus was broken to a considerable extent.

(CASE 262.) 24th October, 1829. A woman in the seventh and half month of pregnancy, residing at 2, Parker-street, had a great discharge of blood from the uterus for thirty-six hours before I saw her. A large portion of the placenta was hanging through the os uteri into the upper part of the vagina. I proposed immediately to deliver by turning the child, but she obstinately refused to submit to the operation, and I was apprehensive that she would die undelivered. The hemorrhage continued with great violence for several hours, when the placenta and a dead foetus were expelled without assistance. She remained long in a state of great exhaustion, but ultimately recovered.

(CASE 263.) On the 8th Feb. 1830, I was called to a woman residing in Falconberg-court, who had been attacked with profuse uterine hemorrhage at the end of the seventh month of pregnancy. The placenta was protruding through the orifice of the vagina. I immediately extracted it, and a dead child followed. A great hemorrhage succeeded, and she remained for a considerable time insensible, without any pulse to be felt at the wrists. She, however, gradually recovered.

(CASE 264.) On the 24th of March, 1835, I was requested by Mr. French, surgeon to the St. James's Parochial Infirmary, to deliver a patient of the institution, who had uterine hemorrhage, with presentation of the placenta. A great quantity of blood had escaped, and she was much exhausted. The os uteri being soft and largely dilated, I immediately proceeded to deliver by passing the right hand into the uterus, through the opening made by the detachment of the placenta from its cervix, and by rupturing the membranes, and turning

the child. No difficulty was experienced in extracting the trunk, the head and superior extremities of the child and the placenta soon followed. The hemorrhage immediately ceased, and the recovery was rapid. The child was dead. Nothing could be more easy than the operation of artificial delivery in this case, and its performance required only a few minutes. I was called to it from the Medico-Chirurgical Society, and returned before the meeting broke up.

(CASE 265.) A few days after the preceding case, I was consulted by the late Mr. Gosna about a patient in the eighth month of pregnancy, who had flooding from attachment of the placenta to the lower part of the uterus. A large quantity of blood had been lost, and it was evident, from the effect produced by this upon the system, that she would speedily sink, if artificial delivery were not at once performed. The orifice of the uterus was widely dilated, and a large mass of the placenta detached was distinctly felt through it. The operation of turning was immediately performed as in the last case, the hand being passed up into the cavity of the uterus at the part where the separation of the placenta from the cervix had taken place. The placenta was soon after removed, and the hemorrhage did not return. The child was still-born. The mother recovered rapidly.

(CASE 266.) On the 26th April, 1835, I was called to a patient of the St. Marylebone Infirmary, who was more than seven months pregnant, and had been attacked fourteen days before with alarming uterine hemorrhage. The first discharge of blood took place during the night when she was at rest : it was not preceded by a sense of uneasiness about the uterus, and could be referred to no accident or injury of any kind.

A considerable oozing of blood still continued when I first saw her. The placenta presented ; the orifice of the uterus was opened to the size of a crown piece, but its margin was so hard and undilatable, that I found it impossible, without employing too great force, to pass

the hand into the uterus. After a cautious trial for about half an hour to get the hand insinuated through the orifice, I was compelled to withdraw it altogether, as there was no hope of overcoming the resistance. On the 27th, the flow of blood continued, the strength remaining unimpaired, and the os uteri being not less unyielding, I resolved to wait till relaxation should take place, and moderate the discharge by the recumbent position, and the application of cold externally and internally. 28th. A large quantity of blood suddenly escaped, which produced complete syncope. The countenance was afterwards pale, the extremities cold, and the pulse rapid and feeble. The os uteri being soft and dilatable, I immediately passed up the hand and delivered by turning. The child was born alive. The placenta was removed soon after; but though no further loss of blood was experienced, she continued gradually to sink, and died in a few days.

(CASE 267.) On the 7th October, 1835, I was requested by Mr. Gairdner, of Foley-place, to see a patient, residing in Frith-street, who had completed the seventh month of pregnancy, and had been attacked with uterine hemorrhage three weeks before. A slight discharge of blood had continued during the whole of this period, but it had produced little effect upon the system until a few hours before I saw her, when several pints of blood were suddenly discharged, and her whole strength seemed at once extinguished. The pulse was not perceptible; the extremities were cold, and the respiration feeble. The blood still continued to flow in great quantities, and it was evident death would soon take place if the uterus were not speedily emptied of its contents. The os uteri was not dilated to the size of a crown, and it was so rigid, that I found it absolutely impossible, though I employed a degree of force scarcely justifiable, to pass more than three fingers within it. The whole hand could not be made to pass, though it appeared certain that death would soon take place, if

delivery was not immediately accomplished. On the fingers being withdrawn for a short time the flooding continued. I made another effort to turn the child, but the resistance could not be overcome. I then pressed forward the fore and middle fingers of the right hand between the placenta and uterus, so as to reach the membranes, which I succeeded in tearing open. Pressing the fingers still forward, they came in contact with one of the feet, which they grasped and brought down into the vagina. This was pulled lower and lower, till the whole extremity and nates were drawn into the os uteri ; but so rigid did it continue to be, that although I exerted all the force I dared employ in dragging it down, half an hour elapsed before the pelvis of the child could be made to clear the orifice of the uterus. At last it was extracted, with the placenta, and the hemorrhage ceased. A violent rigor followed, which threatened for a time to destroy the patient. Bottles of hot water were applied to the feet and pit of the stomach, the whole body was covered with hot blankets, and brandy was liberally administered. She slowly recovered from the effects of the immense loss of blood.

(CASE 268.) On the 18th October, 1835, Mrs. Ryan, whose pelvis is greatly distorted by rickets, was attacked suddenly with profuse uterine hemorrhage in the eighth month of pregnancy. I had delivered her once by craniotomy, and induced premature labour five times. She refused to submit to the operation on this occasion. On examination, at four o'clock the following morning, a large portion of the placenta was felt detached, and protruding through the os uteri. The orifice, though not much dilated, was in a state to admit of artificial delivery ; but so great was the distortion of the pelvis, that I found it impossible to introduce the hand within the pelvis to turn the child. The flooding still continued. There were no labour-pains. I could feel the head above the brim of the pelvis, and I determined to endeavour to open and extract it with the crotchet. Mr. Brookes,

surgeon to the British Lying-in Hospital, pressed hard over the fundus uteri, while I pushed forward the fore and middle fingers of my left hand to the head, which I could scarcely touch. In the groove formed between these fingers, the point of the perforator was conducted to the head, and pressed steadily through the integuments and bone, and then the blades were opened. The undilated state of the orifice rendered this difficult, but it was accomplished without inflicting any injury on the orifice. The crotchet was then introduced into the opening in the skull, and the head was dragged down between the placenta and uterus into the brim of the pelvis, where it stuck fast for a long time. The orifice of the uterus was still imperfectly dilated. After four hours very hard work, we succeeded in getting the base of the skull through the brim into the cavity of the pelvis, and delivered. The placenta was removed soon after the child, and no hemorrhage followed. This woman recovered in the most favourable manner, and she has since had premature labour induced five times at the end of the seventh month of gestation.

(CASE 269.) At six A.M. 28th October, 1835, I was called by Mr. Cathrow, of Weymouth-street, to a patient seven months pregnant, who had been attacked with uterine hemorrhage fourteen days before. It had occurred spontaneously : it returned slightly a week ago, and again went off. This morning it was renewed with increased violence, and was accompanied with labour pains. Mr. Cathrow examined, and found the placenta protruding through the os uteri. He drew it forward gently, and the whole ovum escaped without rupture of the membranes. The flooding ceased on the application of cold vinegar and water to the external parts, and she was soon quite well. A similar accident had occurred to her in a former pregnancy.

(CASE 270.) At eleven A.M., on the 30th October, 1835, I was requested by Mr. Crellin, Wellington-road, to see a patient, æt. 40, who was in the ninth month of

pregnancy, and for fourteen days had suffered from slight uterine hemorrhage. On the 29th, and morning of the 30th, it greatly increased, and was accompanied with alarming fits of faintness succeeding each other rapidly. I found the os uteri dilated to about the size of a crown piece, and rigid. The placenta, partially detached, was felt at the posterior part of the neck of the uterus. The membranes were distinctly felt at the anterior part and the head of the foetus presenting above them. The pulse was neither rapid nor feeble, and the strength did not seem much impaired; the operation of turning, if practicable, did not appear to be necessary in this case. I endeavoured with the nail of the fore finger to tear the membranes, and believed I had done so, but was mistaken; the hemorrhage soon returned, when three doses of ergot of rye were administered by Mr. Crellin; but though pains were produced, the hemorrhage continued, and at four P. M. I discovered that the membranes were entire, and that no liquor amnii had escaped. I drew the nail like a saw for some time over a portion of them, and at last the liquor amnii began to escape in large quantity, and strong uterine contractions followed. The head of the child was soon pressed down between the anterior portion of the neck of the uterus and the placenta, where the separation had taken place, and the labour was safely completed in an hour. There was no hemorrhage after the membranes had been perforated. The child was dead. This patient had not recovered from the effects of the loss of blood for several weeks, and for several months a constant sanguineous discharge from the uterus remained.

In several other cases similar to the preceding, of partial placental presentation, the membranes were ruptured, and the delivery safely completed, without the operation of turning.

(CASE 271.) On the 10th of November, 1835, I was requested by Dr. N. Grant to see a woman residing in Lower James-street, who had been suddenly attacked

with profuse uterine hemorrhage in the eighth month of pregnancy. Six days before, without any accident, when she had gone out to market, a great gush of blood took place from the uterus, which produced faintness. No fresh discharge occurred till this afternoon, when another immense flow of blood took place, and complete prostration of strength followed. When Dr. Grant was called to her at half-past three, p. m. the hemorrhage continued, and she was almost completely insensible, with cold extremities and a rapid feeble pulse. He found the placenta presenting. At four p. m. the flooding continued. The vagina was partially filled with clotted blood. On passing up the hand, I found the placenta adhering all round to the neck of the uterus. There was no point where the organs were completely separated from one another, where the hand could be readily introduced into the cavity of the uterus. Though the os uteri was considerably dilated, I found, on attempting to pass the hand, that it offered great resistance. This was, however, gradually overcome, and the fingers were slowly insinuated behind, between the uterus and placenta, into the cavity, and the membranes were ruptured, and the child speedily delivered by turning. The placenta came away soon after, and an immense flow of blood took place immediately after from the vagina. This was soon checked by the external application of cold, and the introduction of the plug; but the pulse became imperceptible, the face covered with a clammy perspiration, the lips and hands livid, breathing hurried, with great restlessness, and she died two hours after. Stimulants were wholly ineffectual in this case.

(CASE 272.) St. Marylebone Infirmary, 17th Nov. 1835. A young married woman, in the eighth month of her second pregnancy, was brought last night into the lying-in ward, in consequence of an attack of uterine hemorrhage. She reported it to have been produced by great bodily exertion the preceding day. The hemorrhage had almost entirely ceased on the 16th. At two p.m.,

on the 17th, I examined, and found a portion of the placenta detached within the orifice of the uterus. The os uteri was slightly open and rigid, pulse not feeble, faintness entirely gone. As she was not in a condition to admit of artificial delivery, rest in the recumbent position, cool air, &c., were recommended until the circumstances should justify interference. 18th. The hemorrhage returned, and the edge of the placenta being distinctly felt passing into the membranes, they were ruptured, and the liquor amnii discharged; labour-pains soon came on, and a dead child was pressed down between the uterus and placenta where they had been separated. The placenta was extracted soon after, and the hemorrhage did not return. This woman died afterwards from deep-seated inflammation of the uterus.

(CASE 273.) I was requested by Dr. Boyd, St. Mary-lebone Infirmary, to see a patient belonging to the institution, who had been attacked on Christmas-day, 1836, with uterine hemorrhage during a severe fit of coughing. It disappeared without producing faintness, but returned thrice to a much greater extent, and produced a marked effect upon the constitution. The countenance, when I first saw her, was pale, the hands cold, the pulse rapid and feeble, and a considerable hemorrhage still continued. There were no labour-pains. The movements of the child had been recently felt. The os uteri was so much dilated that the points of four fingers and the thumb could be readily passed into it. The circumference was not thin, but it was soft and dilatable, and I experienced no difficulty in introducing the hand between the anterior part of the orifice and the detached placenta, a portion of which was hanging into the vagina behind. Before the whole hand entered the cavity of the uterus, or the membranes were ruptured, I grasped one of the feet. The operation of turning was easily completed, and the child was born alive. The binder had been applied around the abdomen before the operation began, and it was tightened

several times during the progress of it. I left the placenta for some time in its situation after the extraction of the child, to produce the effect of a plug. It was afterwards removed without difficulty when the uterus had contracted, and the patient recovered in the most favourable manner.

(CASE 274.) March 24, 1836, I was requested by Mr. Saunier, to see a patient seven months pregnant, who after suffering several days from uterine hemorrhage, was suddenly reduced to a state of the most alarming weakness, from a great gush of blood taking place. When I saw her the blood was flowing copiously. The placenta could be felt adherent at the back part to the cervix uteri, at the fore part I felt the membranes. The orifice was so rigid, that it was impossible to pass the hand into the cavity of the uterus to turn. I ruptured the membranes, and a great quantity of liquor amnii escaped, after which the flooding entirely ceased. The ergot of rye was given, but labour-pains did not come on till the afternoon of the 26th, the second day after the membranes had been ruptured, when the child and placenta were expelled without a renewal of the hemorrhage. On the 28th she had violent rigors, with headache, delirium, and a rapid feeble pulse. Symptoms of uterine phlebitis manifested themselves in a few days, and she died on the 11th April, from inflammation of the lungs. For a week before death, she suffered excruciating pains in the right shoulder joint and arm.

(CASE 275.) May 12, 1838, I was requested by Mr. Kennedy, Tavistock-square, to see a patient who had awoke in the morning, greatly alarmed by a discharge of blood from the uterus. The quantity lost had not been great, and the strength of the constitution was unimpaired. The orifice of the uterus was high up, and slightly open. I felt the placenta at the cervix. There were no labour-pains. Delivery was considered unadvisable at the time. 15th. Hemorrhage has con-

tinued, but not profusely, until this morning, when a great quantity of blood suddenly escaped, and she became extremely faint. There were no pains. The os uteri was largely dilated. I introduced the fingers of the left hand through the os uteri, and before the whole hand had passed into the cavity, I was able to lay hold of one of the feet, and turn the child. The child was dead. The placenta was extracted soon after, and the flooding ceased. She recovered favourably.

(CASE 276.) On the 3rd December, 1836, I was called by a medical practitioner to a patient seven months pregnant, who had been attacked on the morning of the previous day with uterine hemorrhage. It returned twice in the course of the day, and again ceased without producing any great effect upon the constitution. The ergot of rye was repeatedly given without any attempt being made to ascertain whether or not the placenta presented. At one A. M., when I first saw the patient, the extremities were cold, and pulse scarcely to be felt. She was extremely faint. The os uteri was widely dilated, and a large portion of the placenta felt at the posterior part of the cervix. The operation of turning was easily performed, and did not last five minutes. The child was dead. The uterus having contracted, the placenta was removed in half an hour after the child. No hemorrhage followed. For three days she appeared to be recovering. Rigors, urgent thirst, pyrexia, pain in the loins and right side of the abdomen took place, and she died about ten days after with the usual symptoms of inflammation of the veins of the uterus.

(CASE 277.) On the 20th December, 1836, Mr. \_\_\_\_\_ requested me to see a patient residing in Lower Eaton-street, who had been attacked with repeated discharges of blood from the uterus in the eighth month of pregnancy. The placenta was felt through the orifice of the uterus. The bleeding had produced great exhaustion, yet the ori-

fice of the uterus was not in a condition to admit of artificial delivery. For some days the hemorrhage was controlled, but it returned with great violence, and Mr. —— passed up the hand into the uterus, and delivered the child alive. The placenta soon came away, and she appeared for two hours to recover, and then suddenly expired without any further loss of blood.

(CASE 278.) March 10th, 1837, I was called to see a patient who had been attacked with profuse uterine hemorrhage four weeks before, when at the end of the sixth month of pregnancy. It had returned at intervals, but in a slight degree. During the preceding night, a large quantity of blood had escaped. Twenty grains of the ergot of rye had been administered about half an hour before I saw the patient, although no examination had been made to ascertain the actual state of the case. Pain followed the ergot, and a great increase of the discharge. I found the orifice of the uterus soft, and widely dilated, and a large portion of the placenta hanging through it, detached from the cervix. I passed up the hand readily into the uterus, and laid hold of one of the feet of the child before the membranes were ruptured. The child was extracted alive without difficulty. The placenta was left as a plug till the uterus had contracted. The patient speedily recovered. Ergot should never be given in hemorrhage till the fact is determined that the placenta is not attached to the neck of the uterus. It can do no good in presentation of the placenta.

(CASE 279.) July 19th, 1837. Mr. Tucker, of Berner's-street, requested me to see a patient in St. Martin's-lane, who had presentation of the placenta, and was reduced to a state of extreme exhaustion by the loss of blood. She was near the full period of pregnancy, and during the preceding seven days had, at short intervals, lost a large quantity of blood. I passed the hand readily through the orifice of the uterus,

though it was not dilated more than an inch and a half in diameter, and after rupturing the membranes, grasped the feet of the child and delivered without difficulty. The placenta was not removed for a considerable period. No hemorrhage followed, and the patient recovered after a severe attack of uterine phlebitis.

(CASE 280.) On the 27th December, 1837, I saw a case of uterine hemorrhage in the ninth month with Mr. Bushell. He felt the placenta adhering to the neck of the uterus. I examined, and found the orifice a little dilated and the placenta within, and was not able to feel its edge. The discharge had not been very great, had occurred only once, and had produced no effect on the constitution. The following day labour-pains came on, and when I examined, the os uteri was widely dilated, and the head pressing through the os uteri into the vagina ; the membranes were immediately ruptured, and in a short time a living child was expelled with the cord twice round the neck. The placenta soon came away, and the hemorrhage which followed was soon checked.

(CASE 281.) June 11th, 1838. Dr. Boyd sent to request me to attend an out-patient of the St. Marylebone Infirmary, who had been attacked five days before while in the seventh month of pregnancy with uterine hemorrhage. A great quantity of blood had been lost, and the discharge going on rapidly with frequent fits of syncope. Dr. Boyd proceeded to deliver by turning. I saw her soon after, when the placenta had been removed, and the hemorrhage had ceased. There was still great faintness, the extremities were cold, and the pulse scarcely perceptible. She recovered from the immediate consequences of the hemorrhage, but afterwards died with all the symptoms of suppuration of the uterine veins.

(CASE 282.) On the 12th January, 1839, Mr. Jones, of Carlisle-street, Soho-square, called me to see a lady in the eighth and a half month of pregnancy, who had

been attacked with uterine hemorrhage a month before. It first took place without any accident or pain, and the quantity lost was about half a pint, and it produced little effect upon the constitution. She remained quiet for several days, and then got up, and only felt a little weak. For ten days she went about, but the hemorrhage returned on the fifteenth day after the first attack, but not to a great extent. Seven days after this, a third and more profuse hemorrhage took place. It gradually went off, but not so quickly as the other attacks. At one o'clock, 12th January, it was renewed to an alarming extent without any pain, about a quart of blood was suddenly lost, and she became extremely faint. At four A.M. the discharge still continued. When I first saw her at seven o'clock, she felt faint, the pulse was rapid and feeble. The upper part of the vagina was filled with a large clot of blood, which adhered to the os uteri. By displacing this at the back part, I could distinctly feel the placenta adhering all round to the neck of the uterus, which was thick and rigid, and very little dilated. The effect produced by the hemorrhage was so great, that it was evident death would soon take place if the delivery were not speedily completed; and the state of the orifice was such, that it was certain the hand could not be passed, but with the greatest difficulty. At eight o'clock, Dr. Merriman saw her with us, and agreed that immediate delivery was necessary. I passed the right hand into the vagina, and insinuated my fingers between the uterus and placenta at the back part, and reached the membranes. But the rigidity of the orifice was so great, that though I employed great force for a considerable time I could not succeed in getting the hand into the uterus. Dr. Merriman recommended rupturing the membranes, and I was proceeding to do this with the fingers, when I felt one of the feet of the child, which I grasped and brought down into the vagina enveloped in the membranes, which then gave way. Nearly half an hour elapsed before the version

could be completed, and when it was effected, the neck of the uterus grasped the neck of the child so firmly, that I experienced the greatest difficulty in extracting the head, and not till I had made pressure for some time with the finger, and dilated the orifice of the uterus. A great discharge of blood instantly followed, the placenta was removed, and every means employed to stop the hemorrhage, but the breathing became hurried, the extremities cold, and she died in less than an hour after delivery. Dr Merriman informed me, that a patient of his had actually died under similar circumstances before the head could be extracted. He considers the tampon as of little or no use in such cases.

The next case of hemorrhage from placental presentation, which I shall relate, occurred to Dr. H. Davies and myself more recently, and the circumstances were, if possible, still more distressing and unfortunate.

(CASE 283.) Mrs. H. was attacked with uterine hemorrhage at the beginning of February 1839, when seven and a half months pregnant. About twelve days after, it returned a second time, and yesterday morning a third time. About half-past twelve on the 5th March, Dr. Davies requested me to see her with him, as the hemorrhage had returned in a dangerous form, and the orifice of the uterus was not in a condition to admit of delivery. We found the placenta adhering all round to the neck of the uterus, the orifice rigid and undilatable, and open to the extent of a crown. The head of the child presenting. By cold applied externally and internally, the hemorrhage was restrained till six o'clock in the morning, when it was renewed with violence. Dr. Davies then pressed his fingers through the placenta, tore it in two parts, and perforated the membranes. Half past eight A. M. no hemorrhage. Slight pains. Eleven A. M. no flooding. Head pressing into the orifice of the uterus. We were prevented at the time from perforating and extracting the head by the rigid state of the os uteri. She seemed to regain

strength during the day, but at ten in the evening, without any further loss of blood, she began to breathe with great difficulty, the lips were livid, the hands and feet cold, and it was evident she would soon die undelivered, if we did not interfere. I opened the head, and extracted it with the greatest difficulty in consequence of the firm and rigid state of the os uteri. The operation was scarcely completed before she was dead.

(CASE 284.) At two o'clock in the morning, 30th July, 1839, Mrs. R ——, æt. forty, 9, Hadlow-street, Burton-crescent, was suddenly attacked with a profuse hemorrhage. She was seven months pregnant, and perfectly well till the flooding commenced. I saw her at half past ten A. M., when the os uteri was dilated to the size of half-a-crown, but thick and rigid. The placenta was adhering nearly all round to the cervix, the hemorrhage continued, and she was very faint. I endeavoured to pass the whole hand into the uterus to deliver, but found it impossible to introduce it. The fore and middle fingers were, however, easily passed up between the placenta and uterus on the fore part, and with these, before the membranes were ruptured, I seized a foot and brought it into the vagina, and soon extracted the child, which was dead. The placenta followed, and there was no further hemorrhage, and the recovery was rapid.

(CASE 285.) On the 22nd February, 1840, I examined the body of Mrs. Cook, æt. thirty-three, who had resided in John-yard, Lisson-grove. A great uterine hemorrhage had taken place spontaneously, six weeks before when she was seven months pregnant. Another took place on the 19th February, which continued till the evening of the 21st, when her medical attendant, with some difficulty, introduced the hand into the uterus, perforated a portion of the placenta, and turned the child. The head was extracted with difficulty. The placenta soon followed, but she soon after began to sink, and died in an hour and a half.

There was an extensive laceration in the mucous and muscular coats of the cervix uteri, on the left side, and a smaller and more superficial rent on the right side. The placenta had adhered to the whole circumference of the cervix. The pelvis measured only two inches and three quarters from the base of the sacrum to the symphysis pubis. It was the fourth time she had been pregnant. Labour had come on spontaneously at the seventh month of her first pregnancy, and the child was born alive, and has been reared. She went to the full period with her second child, and was delivered by craniotomy. Premature labour was induced at the seventh month of her third pregnancy, but the child was born dead. Case 181 resembles this case, in the distortion of the pelvis being complicated with uterine hemorrhage from attachment of the placenta to the neck of the uterus.

(CASE 286.) On the 9th October, 1840, Dr. Scott, of Barnes, requested me to see a lady in the seventh month of pregnancy, who had been attacked in the morning with profuse flooding. For several days before she had suffered from sense of weight and uneasiness about the uterus. The edge of the placenta was distinctly felt by Dr. Scott, and he ruptured the membranes, and left the case to nature. We considered it unnecessary to turn the child. Strong labour pains having immediately followed, a dead child was expelled in an hour, and soon after the placenta, without a renewal of the discharge. The recovery was rapid and complete.

(CASE 287.) Mr. Hill, of Guildford-place, requested me to see a lady on the morning of April 7th, 1841, who was in the eighth month of pregnancy, and who a month before had hemorrhage from the uterus, but not very profuse. On the 3rd April, a great gush of blood took place during some bodily effort, but she did not faint, and she went about again till the morning of the 7th, when an immense discharge took place,

followed by faintness, coldness of the extremities, and great rapidity and feebleness of the pulse. The os uteri was thick, and so high up, and so little dilated, that it was with the utmost difficulty I could pass the fore and middle fingers within it. At first I thought it was the smooth membranes I touched, and I tried to rupture them, but the sudden gush of blood which followed soon led me to push the inquiry further, and to ascertain that the placenta adhered all round the cervix, as Mr. Hill at first believed. A more unfavourable case for the operation of turning could not have occurred, yet its immediate performance was necessary, to prevent death taking place without delivery. The whole hand was passed into the vagina, but only the fore and middle fingers could possibly be introduced between the placenta and uterus. After great exertion I succeeded, with these, in drawing down a foot into the vagina, and after long-continued efforts, extracted the trunk and head of the child. The os uteri seemed at first to grasp the neck with a deadly force which could not be overcome, but it ultimately yielded and allowed the head to pass. The placenta was detached, and soon came away, and no hemorrhage followed. The pulse could scarcely be perceived for many hours after, but the circulation in the extremities was gradually restored, and she recovered.

(CASE 288.) April 15th, 1842, the same patient being in the sixth month of pregnancy, hemorrhage took place, and the placenta was found partially adherent to the cervix. The membranes being ruptured, a dead child was soon expelled without turning.

(CASE 289.) On the 19th May, 1841, an experienced practitioner requested me to see a patient who was in the seventh month of pregnancy, and who had been attacked with uterine hemorrhage three weeks before. It was profuse, but ceased, and did not return till the evening of the 17th May, when it induced great faintness. It had not entirely ceased when I saw her two

days after, and she was faint with a feeble rapid pulse. The os uteri was open to the size of a crown, and the placenta adhered nearly all round to the cervix. Immediate delivery being necessary, the hand was passed up without much difficulty between the placenta and uterus, and delivery accomplished by her accoucheur in a quarter of an hour. While extracting the child, there was a convulsion fit with foaming at the mouth. Another convulsion fit soon followed the delivery, with jactitation, vomiting, and inclination to sleep, and she died in less than four hours.

(CASE 291.) Mr. Jonson, of Grosvenor-street West, took me, on the 26th May, 1841, to see a case of uterine hemorrhage in the eighth month of pregnancy, from placental presentation. The first attack of flooding had occurred spontaneously, three weeks before, without any pain. It had returned several times, but not very profusely. The os uteri, high and rigid, was open to the size of half-a-crown, and the placenta was adherent all round except at one point, where it had been detached. In the evening a sudden gush of blood took place, followed by great faintness. The delivery was immediately effected by passing the hand between the detached portion of placenta and uterus, and turning the child. The hemorrhage ceased, and the patient speedily recovered.

(CASE 292.) On the 10th November, 1841, I was called by Mr. Roach to a case of sudden and profuse uterine hemorrhage near the full period of pregnancy. The quantity of blood discharged in an hour was very great, and was followed by syncope. The flow of blood had ceased when I saw the patient soon after, and it did not return, though the edge of the placenta was felt detached and slightly protruding through the orifice. The following morning labour-pains came on, the membranes gave way spontaneously, and the child was born alive, without any artificial assistance. The placenta soon followed, without any discharge of blood. She recovered quickly.

(CASE 293.) At six A.M. on the 13th Nov. 1841, Mr. Rouse, of Walham-green, called me to see a lady eight months pregnant, who had awoke two hours before with a profuse discharge of blood from the uterus. She rose, and sat upon a foot-pan, and it continued to flow till she became faint, and was replaced in bed. At six o'clock it still continued, and a very great quantity had been lost. The os uteri was so high up, and so much directed backward, that it was extremely difficult to introduce the fingers within the orifice to discover if the placenta presented. At last we succeeded in ascertaining that it adhered to the cervix nearly all round. The orifice was thick, and it admitted two fingers, but it was dilatable, and the hand was immediately and without difficulty passed into the uterus, and the child delivered alive. The placenta soon came away, and the recovery was rapid.

(CASE 294.) January 5th, 1842. At six P.M., called by Mr. Angus, of Greek-street, to a patient residing in Maiden-lane, at the end of the seventh month. A great quantity of blood had been lost, but the strength was little impaired. The os uteri was dilated to the size of a crown, and not rigid. The placenta adhered all round to the cervix. I passed up the hand between the uterus and placenta, where they were most detached, as I think ought to be done in all similar cases, and without difficulty, seized and brought down a foot into the vagina. Some difficulty was experienced in extracting the nates through the os uteri. The placenta soon followed the child, which was dead. The mother soon recovered.

(CASE 295.) About the middle of July, 1842, Mr. Harvey, of Great Queen-street, was sent for to a private patient in the eighth month of pregnancy, who had a discharge of blood from the uterus, but not in sufficient quantity to affect her constitution or to excite much alarm. It disappeared in a short time, and she continued quite well till the morning of the 4th August, when the

discharge of blood was renewed. Mr. Harvey found her literally deluged with blood, and the placenta adhering all round to the cervix uteri. The orifice was open to the size of half-a-crown, and its edge thin and dilatable. He proceeded at once to deliver by turning, which he accomplished with the greatest ease, and in a short time, and the child was born alive. The delivery was soon followed by faintness, and the usual consequences of great loss of blood, and she was dead before I saw her.

(CASE 296.) Mrs. T——, Gloucester-mews East, was seized with uterine hemorrhage, at the end of the seventh month, but it was not so great as to produce faintness. It went off, and returned six weeks after, and then continued at intervals for eight days. On the morning of the 7th September, 1842, there was a great discharge of blood, with faintness and feebleness of pulse, and coldness of the extremities. At two p. m. I saw the patient with Mr. Tucker and his brother, and on examining found the os uteri dilated to the size of half-a-crown, and the placenta adhering everywhere to the cervix. I immediately passed the hand into the vagina, and slowly through the os uteri, which gradually yielded, and permitted it to enter without much force, but the placenta adhered so firmly all round, that I was obliged to push the fingers through the placenta to get at the feet and turn. The os uteri did not allow the nates to pass so readily as the hand, but it yielded in a little time, and the delivery was safely accomplished. The placenta was soon expelled, and there was no hemorrhage. There was a great faintness for a quarter of an hour, but the patient recovered, and is now, two days after, going on well.

In seven of these thirty-five cases, death took place soon after delivery from loss of blood, and in six, at periods more or less remote from the time of delivery by uterine phlebitis, or inflammation of the deep structures of the uterus. In one with distorted pelvis the

uterus was lacerated. In eleven there had been more or less rigidity of the os uteri, with dangerous hemorrhage, and turning was performed in several of them, where the whole hand could not be introduced into the uterus. The tampon or plug was not beneficial in any of them, and the ergot did positive injury. Rest in the recumbent position, and the application of cold, were the only means found really useful in checking the hemorrhage till delivery could be effected. Dr. Joseph Clarke met with four cases of placental presentation in the Dublin Lying-in Hospital, one of which proved fatal. Dr. Collins met with eleven in 16,654 labours. Two of the women, where the children were turned, died. Dr. Ramsbotham has related nineteen cases of placental presentation, eight of which, proved fatal. In five the placenta was only partially adherent to the cervix, and in three the expulsion of the placenta took place before the child. Out of one hundred and seventy-four cases of placental presentation recorded by different authors, Dr. Churchill states, that forty-eight proved fatal, or nearly one in three, and that in eighty-five cases of uterine hemorrhage where the placenta was at the fundus uteri, twenty-four proved fatal, or nearly one in three.

## SIXTH REPORT.

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### THE HISTORIES OF THIRTY-EIGHT CASES OF UTERINE HEMORRHAGE, IN WHICH THE PLACENTA HAD BEEN DETACHED FROM THE UPPER PART OF THE UTERUS.

"IN my own practice," observes Dr. Merriman, "upwards of thirty cases have occurred of accidental hemorrhage during parturition, in which I have adopted the method of rupturing the membranes as a means of lessening or suppressing the flooding, and as yet have had no reason to be dissatisfied with the plan, for in every instance the discharge has entirely ceased, or has been so much diminished as to secure the safety of the patient, and yet there were some among these patients, whose cases, from the profuse hemorrhage, were abundantly alarming." Dr. Merriman has informed me, that he has, since the publication of this statement, witnessed three cases in which the flooding was not arrested by rupturing the membranes, and Case 209 was one of these. Dr. Hamilton states, that during the last thirty years he has met with only two cases where he has adopted this practice, and on both of these occasions he has resorted to it with great re-

luctance. Except in cases where the os uteri is rigid, and where the operation of turning is opposed by the patient or attendants, he says, the practice must be the same as in hemorrhage from the attachment of the placenta over the os uteri, that is, wherever danger threatens the operation of turning must be had recourse to. The following cases may assist in determining the degree of reliance which ought to be placed on rupturing the membranes, the period at which it may be resorted to with the greatest prospect of success, and the best method of accomplishing delivery, where it entirely fails to arrest the hemorrhage.

(CASE 297.) October 29th, 1827, Mrs. Turner, No. 22, Drury-lane, in the eighth and a half month of pregnancy, mother of eight children. Had nearly died from flooding in a former labour. Last night had a severe rigor of three hours' duration, followed by pains at intervals in the region of the uterus. At eight o'clock this morning, a great discharge of blood took place, and at half-past eleven, when I first saw her, a very large quantity of blood had been lost; the countenance was pale, extremities cold, pulse one hundred and twenty, and extremely feeble. Blood still flowed from the vagina. The os uteri soft and very little dilated, and the pains of which she complained produced no sensible effect upon it. I immediately ruptured the membranes, and this was followed by regular strong pains, the disappearance of the hemorrhage, and the descent of the head of the child. The orifice of the uterus was also gently dilated during the pains, and for an hour there was a prospect of the labour being speedily terminated by the natural efforts. The pains, however, again became more and more feeble, and in two hours they ceased completely, and the hemorrhage was renewed, and it was evident she would speedily sink if not delivered artificially. As I had good reason to believe that the child was dead, and feared, from the great exhaustion, she might die during the operation of

turning, I had recourse to craniotomy, which was easily performed. The placenta immediately followed the extraction of the child, and large masses of coagulated blood. The hand was passed into the cavity of the uterus, and at the same time strong pressure made over the hypogastrium, but the uterus would not contract, and a stream of blood flowed over the hand until it was withdrawn altogether. Mr John Prout then dashed cold water over the naked abdomen, and afterwards applied a binder and compress around the abdomen, and introduced linen rags soaked in vinegar and water into the vagina. By these means the hemorrhage was at last arrested, but she afterwards died from inflammation of the uterus.

(CASE 298.) On the 5th November, 1828, at a quarter past two, A. M., Mr. Grant, of Thayer-street, called me to see Mrs. Jones. æt. 31, who was in the ninth month of pregnancy, and had been exposed to great fatigue during the whole of the preceding day. At five P. M. of the 4th of November, the membranes gave way, and the liquor amnii was discharged without uterine contractions. Mr. Grant saw her soon after, and found the head presenting,—there was no uterine hemorrhage or unfavourable symptom. At eight o'clock in the evening her husband returned to inform him that she had fainted, and on recovering complained that she could not see the objects around her. There was then a slight oozing of blood from the vagina, and feeble pains. The symptoms gradually put on a more alarming appearance, till half after two o'clock in the morning. The extremities were then cold, the respiration was laborious, and the pulse could not be felt. Abdomen distended, the os uteri was fully dilated, and the head was sufficiently low in the pelvis for the forceps to be applied. There were feeble pains. I applied the forceps easily, but as she was almost insensible, and it was impossible to preserve her steadily in a position which admitted of the extraction of the head without injuring the soft parts with the

instrument, and as the external hemorrhage became much more profuse, and the symptoms more formidable, the blades of the forceps were withdrawn, and the delivery was accomplished in a few minutes by the perforator and crotchet. A large mass of clotted blood followed the child, and soon after the placenta, and an immense gush of fluid blood succeeded. The hand was passed into the uterus, and a large quantity of coagula extracted, and the hand was kept some time in the cavity to make it contract, but without success ; and the flow of blood continued in spite of pressure, cold, and stimulants, till she sank at five o'clock in the morning.

(CASE 299.) On the 18th of November, 1829, a mid-wife called me to a woman residing at 338, Oxford-street, who was in the ninth month of pregnancy, and had been suddenly attacked with uterine hemorrhage at three o'clock in the afternoon. She had been in perfect health, and had partaken of a hearty dinner, when a gush of blood suddenly took place from the uterus. Slight pains soon followed. I saw her an hour after this, when she was faint, and was suffering much from sickness and vomiting. The os uteri was dilated to the size of half-a-crown, the orifice thick and rigid. I immediately ruptured the membranes, and a large quantity of liquor amnii escaped. The hemorrhage ceased, and the pains became strong and regular. An hour after, the pains had almost entirely gone off, and the flooding returned, with great faintness, hurried breathing, and feeble pulse. It was evident death would soon take place if the delivery were not speedily effected. The thick rigid condition of the orifice rendered turning impracticable, and she was therefore delivered by craniotomy without much difficulty. The abdomen was compressed, and the placenta extracted ; but though very little more blood was lost, the extremities became colder, the breathing more laborious, and the vomiting more urgent, and she died in two or three hours after delivery.

(CASE 300.) At four A. M. on the 22nd June, 1839, I

was requested by a practitioner of great experience and reputation to see a patient in the ninth month of pregnancy, who had awoke two hours before, with pain of the abdomen and sickness at stomach ; vomiting, coldness of the extremities, and great faintness followed. As she was in perfect health at bed-time, the symptoms were believed to arise from indigestion, and some medicine was prescribed for its relief. At four A. M. the symptoms were not relieved, and pains in the lower part of the back began to be experienced, with a slight discharge of blood from the uterus. The orifice of the uterus was slightly open, and the lips thick. The head of the child presented. At five, the hemorrhage increasing, I ruptured the membranes, and gently dilated the orifice with the fingers during the pains. The flow of blood, however, still increased, and the symptoms of sinking became so alarming, that it was evident artificial delivery was the only thing that could save her life. The movements of the child had not been felt since the first attack, and the orifice not being in a condition to allow of the easy introduction of the hand to turn, we resolved to have recourse to the perforator and crotchet. The delivery was easily accomplished, but though no blood was lost after the extraction of the child, and the placenta soon followed without assistance, she continued gradually to become worse, and died at a quarter to eight o'clock. We examined the body the following morning, and found the uterus soft and uncontracted, with a large dark-coloured clot in its cavity. The softening of the walls of the uterus, which could not be the effect of putrefaction, was so great, that the points of the fingers could readily perforate them. The decidua was found adhering to a great part of the lining membrane of the uterus. The lining membrane itself was seen perfectly natural at the upper and back part of the uterus where the placenta had adhered, and everywhere else. There was not the slightest trace of any portion of the membrane being wanting.

(CASE 301.) On the 16th of April, 1829, I was called to a patient residing at 12, Great White Lion-street, who was at the end of the eighth month of pregnancy, and who had been attacked fourteen days before with a severe flooding. It had returned three or four times to an alarming extent, and this day she was so much affected by it, that it was obvious she would sink, if not speedily delivered. No part of the placenta could be felt through the os uteri, which was soft and dilatable, though but little dilated. The presentation was natural. I ruptured the membranes, dilated the os uteri gently, and made pressure with the binder. Slight uterine contractions followed, and continued regular for a short time, but they gradually went off altogether, and the hemorrhage was renewed to a dangerous extent. I passed up the hand into the uterus, and turned the child without difficulty. It was born alive and well. The placenta was removed soon after, and the hemorrhage did not return, yet she sunk into a state of the most alarming exhaustion, and seemed for a considerable time on the point of expiring. She, however, gradually rallied, and in three weeks she was going about and suckling her child as if nothing unusual had occurred.

(CASE 302.) At eight p. m., 24th October, I was requested by the overseers of the parish of St. Andrews, Holborn, to visit a patient in the parochial infirmary, who was in the ninth month of pregnancy, and had been attacked with profuse uterine hemorrhage two days before, and which still continued. The head of the child presented, the os uteri fully dilated, membranes ruptured, pulse rapid and feeble, extremities and face cold, great faintness. The pains were regular and frequent, but they had no effect in pressing the head forward. Mr. Dunn agreed with me in thinking that, as there was no great hemorrhage going on, and the pains were regular, it would be proper to wait for the natural efforts, and support her strength by stimulants. After an hour, the coldness of the face and extremities had increased, the pulse was

more feeble, and the pains, which were feeble and irregular, producing no effect in advancing the head, it was clear she would not be delivered without artificial assistance. The child had not been felt to move for two days. The head being sufficiently low for the forceps, and the parts dilated, I readily applied the instrument and extracted the head. The cord was round the neck, and did not pulsate. The placenta soon came away, and no hemorrhage followed. It would have been better practice in this case to have delivered sooner, by turning or craniotomy. (Case 24.)

(CASE 303.) On the 12th of July, 1835, Mrs. C., when eight months pregnant, had a discharge of blood from the uterus, without any apparent cause. By remaining constantly in the recumbent position, with cold applied to the hypogastrium, the discharge diminished, but never entirely ceased. At six, A. M., the 22nd inst., the flooding returned, with feeble pains at intervals. At eight, the os uteri was felt closed and high up. At six o'clock, the hemorrhage continued with great faintness, a rapid pulse, and pains in the abdomen like cramps. I ruptured the membranes with difficulty, and discharged the liquor amnii, and gently dilated the orifice with two fingers, and made pressure over the fundus. The pains continued feeble and irregular till seven o'clock at night, when there was great faintness, and a feeling of weight and distension of the abdomen. The binder was firmly applied round the abdomen, and wine and other stimulants given, and the pains becoming stronger, the child was expelled dead, with the cord round its neck, at nine P. M. A great quantity of coagulated blood escaped immediately after the child, and the placenta soon followed. More than half of the uterine surface of the placenta was covered by a dark-coloured clot of blood, which firmly adhered to it. This part of it was in a morbid state, being less than one half thinner than the healthy portion, and the death of the child and hemorrhage were both probably to be referred to this cause.

There could be doubt about the propriety of rupturing the membranes in this case when it was done, but it would have been better practice to have delivered six or eight hours after, by turning or craniotomy, when the orifice was so dilatable as to allow of delivery with safety. Where there are symptoms of internal hemorrhage, it is not safe to delay so long to empty the uterus.

(CASE 304.) A lady eight months pregnant was attacked with hemorrhage on the morning of the 14th of November, 1838. When I saw her at five P.M. the medical attendant informed me that the placenta did not present, and that the membranes were ruptured, and the liquor amnii discharged. I found the orifice half dilated, the membranes unruptured, and the hemorrhage still continuing, with great faintness. The membranes were immediately opened, and the hemorrhage ceasing, and the pains becoming strong and regular, the child was expelled putrid in half an hour. The placenta soon came away, and no flooding afterwards took place. The placenta was in a diseased condition, some parts being three times the natural thickness, hard, and of a yellow colour. On cutting into these thickened parts, masses of coagulated blood were found in the interstices of the vessels. It was a perfect specimen of apoplexy of the placenta, and the death of the foetus, and the accidental separation of the placenta, were both to be referred to this cause. The good effect of rupturing the membranes was most striking in this case.

(CASE 305.) Mrs. Lassiere, Oxenden-street, June 4th, 1836, a patient of the late Mr. Saunier's, was on three different occasions attacked with dangerous uterine hemorrhage immediately after the birth of the child. During the last of these attacks, which had nearly proved fatal, I was called to see her after the placenta had been extracted; and the discharge of blood was checked with great difficulty by the introduction of ice into the vagina, the application of cold water to the nates, external parts, and thighs, and the use of the pad and binder.

On the 3rd of June, 1836, this patient being at the full period, and labour commencing, Mr. Saunier consulted me respecting the treatment which ought to be adopted to prevent the recurrence of such a dangerous accident. I advised him immediately to discharge the liquor amnii by rupturing the membranes, and not to wait for the dilatation of the orifice, and on the pains becoming stronger, to apply the binder round the abdomen, and tighten it as the labour advanced—to leave the expulsion of the child entirely to nature—to avoid the use of stimulants, and preserve the apartment cool. This was done, and the uterus contracted after the delivery of the child, and the placenta was expelled without assistance in less than an hour, and so little hemorrhage followed, that it was easily restrained by the application of a napkin soaked in vinegar and water to the parts. I have repeatedly employed the same practice, with the most satisfactory results, in other individuals who had been repeatedly exposed to the greatest danger from hemorrhage after the expulsion of the child and placenta. The exhibition of the ergot of rye is also indicated in these cases, towards the end of the second stage of labour.

(CASE 306.) At one o'clock in the morning of the 23rd of March, 1829, I was called by Mrs. Finlay to a dispensary patient, residing at No. 10, Great Earl-street, who was attacked with uterine hemorrhage in the first stage of labour. The orifice of the uterus was widely dilated, the pains had entirely gone off, and there was great faintness and collapse of the features. I immediately forced my finger through the membranes, held up the head that all the liquor amnii might flow out, and compressed the uterus above, and gave some stimulant internally. Strong labour-pains soon came on, and a dead child was expelled. The placenta followed, and no hemorrhage afterwards took place. Nothing could answer better than did rupturing the membranes in this case.

(CASE 307.) Mrs. Brodrick, 33, Tyler-street, a patient of the St. George and St. James's dispensary, 28th of June, 1824, at half-past four, A. M. without any accident, was seized with uterine hemorrhage and slight pains. At two P. M., several pints of blood in a coagulated state had escaped, the os uteri slightly dilated, and little affected by the pains. I ruptured the membranes, which had now become tense during the pains, and were protruded a little through the orifice. The flooding immediately ceased, the pains became much stronger, and at seven P. M. the child was expelled alive. A great flooding followed, but it ceased on the removal of the placenta, the application of cold water to the external parts, and the binder firmly round the abdomen.

(CASE 308.) On the 4th of September, 1834, I was called to see a woman in the ninth month, who was attacked with uterine hemorrhage after a violent quarrel. The os uteri was rigid, and very little dilated. The membranes could be felt all around. The vagina had been plugged, and several doses of the ergot of rye given. She was extremely faint. The membranes were ruptured, and she did well.

(CASE 309.) On the 22nd of June, 1837, Mr. Walker, of Marylebone-street, called me to see a patient, who had a profuse discharge of blood from the uterus very soon after the commencement of labour. The hemorrhage always increased when the pains went off. She was faint and restless, and was constantly throwing the arms about, and yawning. The upper part of the vagina was filled with clotted blood. The os uteri was soft and considerably dilated, and the membranes were felt all round, and no part of the placenta. The hemorrhage ceased immediately after rupturing the membranes, and in an hour the child was born, and the recovery was rapid.

(CASE 310.) On the 24th of August, 1837, Mr. Gosna requested me to see a private patient, who, after a slight fall, had been seized with a flooding in the eighth month. As the discharge was not very profuse, and the

pulse was little affected, I recommended rest in the recumbent position, and other means to be tried, before rupturing the membranes. The placenta was not felt at the neck of the uterus. The hemorrhage went off for about a week, and then returned to so great an extent, that Mr. Gosna discharged the liquor amnii, and the labour was happily completed in a few hours.

(CASE 311.) About the same period, I was called by Mr. Wise, of Prince's-street, to a case of flooding in the first stage of labour. I immediately ruptured the membranes, and the child was soon expelled without any return of the discharge.

(CASE 312.) On the 30th of June, 1837, Mr. Balderson, of Poland-street, requested me to see Mrs. H—, who was attacked with uterine hemorrhage in the ninth month of pregnancy. The placenta did not present. I ruptured the membranes at half-past eight P.M., when the os uteri was very little dilated. A dead child was expelled at eleven o'clock, and the placenta, which had been wholly detached, immediately after descended into the vagina. A violent rigor and great faintness followed the birth of the child, but she recovered in the course of a fortnight.

(CASE 313.) On the 20th of November, 1837, a lady, who had been repeatedly delivered by the late Dr. Hugh Ley, was without any premonitory symptoms attacked with a violent flooding at the commencement of the ninth month of pregnancy. I found the os uteri soft and little open. There was a sense of weight and dull pain in the region of the uterus, but no regular uterine contractions. The hemorrhage was going on when I ruptured the membranes. It immediately after ceased, and in about two hours a dead child was expelled, with the umbilical cord round the neck. I considered this to have been the cause of the detachment of the placenta, as it probably was in some of the other cases contained in this report.

(CASE 314.) At half past four A. M., 13th May, 1830, I was called to Mrs. P——, æt. twenty-five,

residing at No. 22, Gresse-street, Rathbone-place, by Mrs. Wright and March, the midwives in attendance. About eight o'clock the preceding evening, this patient, being in the ninth month of pregnancy, began to have slight labour-pains, and a considerable discharge of blood from the uterus. The pains continued feeble during the night, and recurring at long intervals. At two A. M. the flooding increased, and a large quantity of blood was lost. She did not appear, however, greatly exhausted when I first saw her at half past four; there were no labour-pains, the os uteri was slightly open and dilatable. I passed up my finger into the os uteri, removed the clots of blood adhering to it, and ruptured the membranes. On the discharge of the liquor amnii, the flooding ceased. By pressing with the finger all round the os uteri, strong pains came on, and the head of the child was soon forced down into the pelvis, and expelled. It was alive. A broad binder was placed round the abdomen before the expulsion of the child, and was afterwards tightened. The placenta came away without difficulty, and the uterus contracting firmly, no hemorrhage followed. The patient suffered little after from the great loss of blood she had sustained.

(CASE 315.) A private patient of Mr. Gardner's, Foley-place, was attacked suddenly in the night, with a most alarming hemorrhage from the uterus. She was in the ninth month, and was in perfect health the previous day, and had been exposed to no accident. I saw her three hours after the flooding commenced. The pulse was extremely feeble, and there was great faintness, with laborious breathing. The os uteri was very little dilated, and on passing the finger I felt the smooth membranes all round. I ruptured the membranes, and gently dilated the orifice with two fingers. The hemorrhage immediately ceased, and the pains becoming strong and regular, the child was expelled dead in an hour and a half. The placenta being wholly

detached, followed the child, and hemorrhage, which had nearly destroyed the patient, again took place. Strong compression of the abdomen, and the vigorous application of cold to the external parts and nates, with stimulants, arrested it, and the patient was soon perfectly restored to health.

(CASE 316.) At five A. M., on the 29th November, 1833, a female, æt. thirty, and eight months pregnant, was attacked with uterine hemorrhage. At eleven A.M., when I first saw her, about two quarts of blood had been discharged, and she was pale, and very faint, and the pulse could scarcely be felt. The os uteri was dilated only to the size of a shilling, and the edge thin and soft. The membranes were felt all round and tense. The flooding continued, with slight irregular pains. I applied the binder round the abdomen, and immediately ruptured the membranes, and discharged the liquor amnii, after which strong pains came on, and the flooding ceased. The child, which presented naturally, was expelled dead in less than an hour. The binder was tightened, and in two minutes the placenta, with a great mass of dark coagulated blood, was expelled. A stream of florid blood suddenly began to flow from the vagina, and the most alarming degree of prostration of strength followed all at once. For several hours she was in a state almost of insensibility, without any pulse at the wrist, and at one time seemed beyond the reach of recovery. The discharge being, however, effectually checked by the introduction of ice into the vagina, and the dashing of cold vinegar and water over the external parts, and the strength supported by stimulants, she eventually did well. An immense quantity of blood was lost in this case, yet the health was not permanently injured.

(CASE 317.) On the 9th September, 1836, at ten P. M., I was called to Mrs. ——, residing at Little Chelsea, who was eight months pregnant, and had fallen down stairs a week before. Hemorrhage to a great

extent had taken place the night before, which caused faintness. The discharge ceased, and returned again this afternoon, and it has continued till the present time. The medical gentleman in attendance had examined, and thought the placenta was over the orifice of the uterus, but the membranes were felt all round, and I could touch no part of the placenta. The orifice of the uterus was considerably dilated. The head presented. Slight pains. Face pallid. Pulse extremely weak. Flow of blood continues. On rupturing the membranes, a great quantity of liquor amnii escaped. The binder was next applied, and the orifice of the uterus gently dilated during the pains. The child was soon expelled with the cord twisted tightly twice round the neck. It breathed for a few seconds, and then died. The placenta being detached, was soon after extracted, as the flooding still continued. By firm pressure over the fundus uteri, the external application of cold and stimulants, it was at last arrested, but not till the strength of the patient was almost completely exhausted. Twelve hours after, the extremities were cold, the respiration laborious, and the pulse could scarcely be felt. The circulation was restored in twelve hours, and she recovered perfectly well. I would interfere earlier in a similar case, and not trust so confidently to rupturing the membranes.

(CASE 318.) An out-patient of the British Lying-in Hospital was attacked with flooding about the middle of November, 1835, when seven and a half months pregnant. The discharge was not very great, and it produced no great effect upon the constitution. On the evening of the 17th December, 1835, it returned in a much more formidable manner, and continued through the night ; and on the following morning, when I first saw her, she was faint, and pale, and the blood was still flowing profusely from the vagina. The whole of its upper part was filled with coagulated blood, which led to the supposition that the placenta presented,

which was not the case. The os uteri was soft, thin, and dilated to the size of half-a-crown or more. The smooth membranes were felt all round, and the head presented. When a binder had been applied firmly round the abdomen, I ruptured the membranes, which I found difficult from their never being put upon the stretch by the pains. Regular labour-pains soon came on after the membranes were ruptured, though the flooding was not entirely suppressed, and in two hours the child was expelled dead. The umbilical cord was round its neck. A large portion of the placenta was covered with a thick dark clot of blood. The structure of this portion of the placenta presented nothing peculiar. It would have been better had this patient been delivered twelve hours earlier by turning or craniotomy. She was so greatly exhausted by the loss of blood, that for some days it was doubtful if she would recover.

(CASE 319.) On the 11th November, 1837, Mrs. Richards, 17, May's-buildings, was suddenly attacked with uterine hemorrhage when near the end of the ninth month of pregnancy. A quart of blood escaped in a few minutes, which produced a disposition to syncope. I found the os uteri soft and dilatable, but little opened. The head presented. No uterine contractions; faintness gone. Pulse ninety, and not very weak. The horizontal position, cold applications, &c. were recommended, and I left the case to nature, and did not rupture the membranes, which I now think ought to have been done. Regular labour-pains commenced soon after my visit, and continued all the evening till midnight, when the delivery was safely effected without artificial assistance of any kind. The small portion of placenta which had been detached, and had given rise to the flooding, was seen covered with a firm layer of coagulated blood.

(CASE 320.) A lady in the eighth month of pregnancy, while dressing for dinner, was alarmed with a profuse discharge of blood from the uterus. It con-

tinued till she fainted, and fell down insensible on the floor. The pulse soon after was full and frequent, and the attack was preceded by a sense of weight and uneasiness in the hypogastrium. Twelve ounces of blood were drawn from the arm, ice in a bladder was laid over the region of the uterus, and she was kept in a state of rest in the recumbent position for several days. The discharge ceased, and she went to the full period, and was delivered of a healthy living child; but after the expulsion of the placenta, a dangerous hemorrhage followed, which was checked with difficulty by pressure, and the application of cold. She recovered, and was able to suckle her child.

(CASE 321.) On the 5th July, 1840, Mrs. ——, æt. forty-one, in the eighth month of her eleventh pregnancy, was seized at five A. M. with an indescribable uneasiness and sense of fullness about the uterine region, with a feeble pulse, but no discharge of blood from the vagina. At three P. M., 6th July, hemorrhage began to take place to a small extent. At ten P. M. there was an immense discharge. Os uteri dilated to the size of a crown, with continual pain. The flooding immediately ceased on the liquor amnii being evacuated by Mr. Owen. At three the following morning, a dead child was expelled, and the placenta followed, with great masses of coagulated blood. Recovered. The membranes might have been ruptured with propriety before the blood began to flow externally.

(CASE 322.) On the 1st July, 1841, Mr. Owen, of Holborn, requested me to see a patient who was attacked, without any apparent cause, with profuse uterine hemorrhage, in the eighth month. The os uteri he found dilated to the size of half-a-crown, and thought the placenta was partially adherent to the cervix. Four hours after, there were slight pains, but the discharge continued with great faintness. I found the os uteri rigid, and the membranes unruptured, and could not

touch any part of the placenta. The liquor amnii was discharged with difficulty, in consequence of the membranes not being put upon the stretch from the feebleness of the pains. The flooding continued, with great faintness, for nearly three hours after the artificial rupture of the membranes, when a dead child was expelled. The placenta was wholly detached, and came away immediately, with a great quantity of blood. This patient was exposed to the greatest danger in consequence of trusting too much to the effect of discharging the liquor amnii.

(CASE 323.) Mr. Jonson, of Grosvenor-place West, called me on the 19th September, 1841, to see a case of dangerous uterine hemorrhage in the seventh month of pregnancy. It occurred suddenly, and without any apparent cause, and was accompanied with constant vomiting, and distressing restlessness, and a condition approaching to delirium. The placenta did not present. The os uteri was little dilated, and Mr. Jonson had much difficulty, from the same cause as in the last case, in rupturing the membranes. The hemorrhage, however, immediately ceased on the escape of the liquor amnii, and a dead child was soon expelled. Recovered.

(CASE 324.) On the 1st December, 1840, Mr. Pocock, Brompton, was called to a patient in the eighth month, who had suddenly been seized with flooding, and lost in a short time about two quarts of blood. Mr. Pocock suspected that the placenta presented, and from the os uteri being very high up, thick, and little dilated, and the anterior wall of the vagina being pressed down, I had much difficulty in positively ascertaining that the placenta was not within reach of the finger. On rupturing the membranes, a great quantity of liquor amnii rushed out, strong pains followed, the hemorrhage ceased, and in six hours she was delivered of a living child, and recovered favourably. The umbilical cord was remarkably short in this case, and the placenta came away with the child.

(CASE 325.) On the 31st August, 1840, I was called to a case of uterine hemorrhage, at Lambeth, in the eighth month of pregnancy. Three medical practitioners had examined, and thought they felt the placenta adhering to the cervix, and that the operation of turning was urgently necessary. The upper part of the vagina was filled with coagula, but on removing these I could distinctly feel the smooth membranes all round and unruptured. A dead child was expelled two hours after the discharge of the liquor amnii, with a quantity of coagulated blood. The hemorrhage, which had been considerable during three days before, ceased on the membranes being ruptured, and the patient did well.

(CASE 326.) A lady, about six months pregnant, had suffered from great uterine hemorrhage during three weeks, with feeble irregular uterine contractions. On the 29th May, 1840, when I saw her with Mr. Pocock, the discharge continued. The os uteri was slightly dilated, the pains feeble, and the pulse very rapid. The head presented on rupturing the membranes, which were felt all round, the flooding ceased, and the case ended favourably.

(CASE 327.) A lady in the ninth month of pregnancy, was attacked with uterine hemorrhage on the 8th December, 1841. It was referrible to no accident. The movements of the foetus had not been felt for some days. Two hours after the membranes were ruptured, a dead child was expelled with the cord twice round the neck. The placenta came away with the child, and the hemorrhage ceased.

(CASE 328.) In a patient of the St. Marylebone Infirmary, the first labour commenced at six p. m., 1st June, 1841. The membranes were soon ruptured, and in the night the funis prolapsed, and in a short time ceased to pulsate. At six o'clock the following morning, a great hemorrhage took place from the uterus. At eight, when I was called to see her, the extremities were

cold, the pulse scarcely perceptible, respiration laborious, and countenance sunk ; blood still flowing. The os uteri was about half dilated, and the head entirely above the brim. The head was perforated, but much force was required to draw it into the pelvis. The placenta, with a great quantity of coagulated and fluid blood, followed the child. The binder was firmly applied to the abdomen, and cold to the external parts, and stimulants were freely administered. The pulse returned, and there was no further hemorrhage, but she died in a few hours. The body was not allowed to be inspected. Though the membranes had burst spontaneously at an early period of the labour, fatal hemorrhage took place. Great difficulty was experienced in drawing the head through the os uteri after perforation.

(CASE 329.) On the 18th December, 1840, I saw a case of profuse flooding in the first stage of labour, with Mr. Curtis, at 49, Great St. Andrew's-street. The discharge ceased immediately after rupturing the membranes, and in a few hours a dead child was expelled, with the funis twisted firmly three times round the neck. This state of the funis is the cause of the detachment of the placenta in a considerable number of cases, and not external injury.

(CASE 330.) On the 12th January, 1840, at eleven a. m., Mr. Owen, Holborn, requested me to see a patient under his care, who had been attacked five weeks before with profuse uterine hemorrhage in the seventh month. It returned three weeks after, and produced faintness. It was renewed a third time on the 11th January, and continued till the day after. The os uteri was so high up, and directed so much towards the sacrum, that I could scarcely reach the anterior lip, and could not succeed in passing the point of the finger through the orifice, so as to ascertain if the placenta was at the cervix. In attempting to pass the finger within the orifice, so much pain was produced, that I was forced to desist, and could not be certain about the precise nature of the case, which I greatly

regretted. I did not, however, feel justified in doing more, as the parts were not in a condition to admit of delivery if the placenta had been found to present, and the state of the constitution was such as not to require immediate interference. The pulse eighty, no faintness, extremities warm. I feared the worst, and Mr. Owen undertook to watch the case narrowly. She was directed to remain at rest, and cold to be applied around the pelvis. On the 15th, slight hemorrhage, with labour-pains, occurred, and on examining we were pleased to find the os uteri dilated to the size of a crown, and no portion of placenta to be felt. The membranes were immediately ruptured, and all went on well. Mr. Owen remarked, that a great swelling of the veins of the lower extremities, which had existed in this patient till the time the flooding took place, suddenly disappeared afterwards. I inferred from this circumstance, that the mechanical pressure of the gravid uterus on the vessels at the brim of the pelvis, is not alone the cause of varicose veins in the latter months of pregnancy. It occurs in many cases too early to be attributed to pressure, and chiefly depends on congestion of the uterine and iliac veins and vena cava.

(CASE 331.) November 27th, 1841, I was called to a case of flooding near the full period, which had nearly proved fatal before I saw the patient. Hemorrhage had occurred, with slight pains; first early in the morning, but to no great extent. There was a considerable draining of blood during the whole day. The membranes were not ruptured. At seven o'clock, the symptoms becoming alarming, the medical attendant passed the hand into the uterus, which was open, and delivered by turning. He found the whole placenta detached. An immense gush of blood followed, she became cold, faint, and restless, with hurried breathing, and died in half an hour. The membranes should have been ruptured early.

(CASE 332.) On the 19th June, 1842, Mr. Owen

called me to see another patient in the eighth month, who had been attacked two hours before with a great flooding. The os uteri was widely dilated, the membranes unruptured, the blood still flowing, and the uterus not acting. A scruple of the ergot had been given without any effect. After giving brandy and water the discharge ceased, and the pains became strong and regular, and the head was soon pressed down to the outlet. The forehead was under the symphysis pubis, and in a short time the child was expelled alive, and the placenta soon followed. The funis was not more than a foot in length, and was inserted into the margin of the placenta, and this part of the placenta on the uterine surface was covered with a thick dark clot of blood, which adhered to it. In by far the greater number of cases of this kind of flooding, the detachment is not the result of accident, and cannot therefore be correctly termed accidental uterine hemorrhage.

(CASE 333.) Mr. Angus, of Greek-street, called me, on the evening of the 10th July, 1842, to a patient who was in the eighth month of pregnancy, and had been suddenly attacked with profuse hemorrhage. For several days she had experienced an unusual sense of weight and uneasiness about the uterus. She had been exposed to no external accident of any kind. At eleven p. m. the hemorrhage continued. The pulse quick and feeble. Os uteri dilated, so as to admit the points of two fingers. Head presenting. The membranes were so closely applied to the head of the child, that I thought it would suffer from the great force I was obliged to use with the finger in tearing the membranes. Labour-pains followed the discharge of the liquor amnii, and in two hours the labour was safely completed, and the child was alive.

When flooding takes place during the first stage of labour, the discharge usually ceases when the uterus contracts, and returns during the intervals of the pains. Here the same practice of rupturing the membranes

should immediately be had recourse to, but if the flooding should afterwards continue, and the pains become more and more feeble, delivery must be accomplished by the forceps, by craniotomy, or by turning, according to the peculiarities of the case, as described by Smellie. When a dangerous flooding takes place after the delivery of the child, and before the placenta has been expelled, strong pressure should immediately be made over the hypogastrium to excite uterine contractions, and the placenta be removed. When hemorrhage follows the natural expulsion of the placenta, or its removal from the uterus by art, there may be either a total want of uterine contraction, or the contractions may not be permanent, but be followed by relaxation, and the effusion of a large quantity of blood, which may either appear externally, or remain to become coagulated and distend the uterus. For several hours after delivery in some cases, this alternate relaxation and contraction goes on, to the great hazard of the patient. By far the most important remedies, and those on which I place the chief reliance in such attacks, are constant and powerful pressure over the uterus, and the exhibition of stimulants, particularly wine and brandy. The abdomen should be strongly compressed with the binder, and folded napkins placed under it, and in addition the hands of an assistant should be applied over the fundus of the uterus. I have seldom found it necessary to introduce a plug of any kind into the vagina in these cases, but where there has been a draining of blood from the uterus, after the practice now described has been adopted, a large piece of sponge has been passed up, which has promoted the coagulation of the blood, and the contractions of the uterus. Perhaps, upon the whole, greater benefit has resulted from introducing smooth pieces of ice into the vagina. I am now convinced from many cases, that the practice so often employed of passing the hand into the uterus, and press-

ing its inner surface with the closed fist round and round to excite it to contract, or to compress the bleeding vessels like a tourniquet, is not only ineffectual for the purpose in the worst cases of this kind of flooding, but that it is attended with mischievous consequences after the flooding has been suppressed.

(CASE 334.) On the 4th September, 1838, I was called to a lady who had nearly been destroyed by uterine hemorrhage after the natural expulsion of the placenta. The binder not having been tightly applied, the uterus became filled with blood. The practitioner introduced his hand to remove the coagula and make the uterus contract, but it did not obey the stimulus of the hand, and the flooding went on till there was no pulse at the wrist, and scarcely any consciousness left; and there is little doubt, if the hand had not been withdrawn, that the case would have ended fatally. The binder was firmly applied, with a thick pad over the uterus, a silk handkerchief was passed into the vagina, and cold vinegar and water applied to the nates and external parts, and as much brandy and port wine were given as the stomach would bear. She remained some hours with cold extremities, a pulse scarcely perceptible at the wrist, anxious respiration, and great faintness. As soon as the hemorrhage ceased, the cold applications were removed, and bottles of hot water put to the feet, and the whole body covered with warm blankets. Recovered, without any effects usually resulting from great loss of blood.

(CASE 335.) On the 15th June, 1839, I saw a case of flooding with Messrs. Thornton and Richardson, which had very nearly proved fatal. A great discharge having immediately followed the birth of the child, the placenta was removed at six p. m. Four hours after, when I saw the patient, the pulse could scarcely be felt. The hands, feet, and whole surface cold. The pulsation of the carotid arteries scarcely felt. Breathing laborious, the breath cold, mouth open, pupils not

dilated. An unconquerable desire to sleep. Consciousness not entirely abolished, and she could see, and knew those around her. She thought she was dying, but only wished to be allowed to sleep. Mr. Richardson said the symptoms were exactly those witnessed in the worst cases of cholera. She had taken brandy, and I gave her more, which was soon rejected. The hemorrhage having ceased, bottles of warm water were applied to the feet and hands, and warm blankets laid over her. She remained for nearly six hours in this condition, and afterwards slowly rallied. I never saw a case of recovery in which the living powers were more reduced, and I should have recommended transfusion of blood had I felt satisfied that it would have been of any use. She recovered perfectly.

(CASE 336.) On the 2nd February, 1837, a case of dangerous hemorrhage occurred in a lady immediately after the natural expulsion of the placenta. No pulse could be felt at the wrist for some time. She could not endure the compress and binder or pressure of any kind over the uterus, and wine and brandy were immediately rejected by vomiting. The dashing of cold water around the pelvis, and the introduction of pieces of smooth ice into the vagina were the only means employed, and the flooding gradually ceased, and she recovered.

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In fifty cases of abortion, of which the histories have been preserved, uterine hemorrhage took place in twenty-six. In forty-six, the detachment of the ovum from the uterus was the consequence of disease in the embryo or its envelopes. In four cases only out of the fifty, could the accident be attributed to an external cause, nor could any change of structure in the ovum be detected. The morbid appearances most frequently noticed in these ova were the following: thickening of the uterine and placental decidua, hypertrophy or atrophy of the placenta, deposits of coagula of blood in the cells of the placenta and of the chorion, the

decidua reflexa hard, yellow, and nearly impervious, having the canals partially obliterated which pass between the cells of the chorion and decidual cavity. Cysts of the placenta and villi of the chorion, the vesicula umbilicalis shrunk and hard, fluid between the amnion and chorion, an excessive quantity of liquor amnii, the umbilical cord unusually short or long, and firmly twisted, the embryo totally absent, or very imperfectly developed, or malformed. Induration and thickening of the decidua, and the formation of clots in the cells of the placenta and of the chorion, were present in a great proportion of these ova, and to these causes the death of the embryo, and the premature expulsion of the ovum, were chiefly to be attributed. In some of these cases the entire ovum was expelled with little pain and discharge, and by the uterine contractions alone. In others, the embryo escaped, leaving all the membranes adhering to the uterus, or the embryo was expelled enveloped in the amnion and chorion, and the decidua left behind for days, or even weeks. Not unfrequently the uterine decidua was torn off all round from the placental decidua, and left adhering to the uterus, while the remaining parts of the ovum, covered by the decidua reflexa, escaped.

In all cases of threatened abortion, the condition of the os and cervix uteri should be ascertained accurately by an external examination; and if the orifice is open, and the neck shortened, and the ovum felt pressing into it, no good can result from attempting to prevent the expulsion of the ovum by anodynes. It is better merely to moderate the discharge, and leave the case to nature. If the os uteri is widely dilated, and the ovum has nearly escaped, it may at once be removed by the fore and middle fingers of the right hand. But this should not be attempted, unless there is the greatest probability of extracting the ovum entire. Where the ovum remains entirely within the uterus, and there is a profuse discharge of blood, one of

the most effectual means of checking this is to pass a large soft dry sponge covered with lard into the vagina, which can easily be done in all cases, and firmly pressed up against the os uteri. This does not interfere with the application of cold to the hypogastrium and external parts, nor with the internal exhibition of acids, lead, ergot, or whatever else may be thought requisite ; and the sponge in the vagina not only checks the hemorrhage, but it has an influence in exciting the contractions of the uterus, and closing the vessels from which the blood is flowing.

I have recently been informed that premature labour may be induced by the same means, without forcing the sponge into the os uteri. I have had no opportunity of trying this method, but if it should always be successful in bringing on labour, there can be little doubt that it will possess great advantages over all the other means which have hitherto been employed for this purpose, and which have been described in the third Report.

## SEVENTH REPORT.

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### CASES OF RETENTION OF THE PLACENTA.

THE following are the histories of seven fatal cases of retained Placenta, and nineteen in which more or less difficulty and danger were produced from portions of the placenta or the entire mass being left within the uterus beyond the usual period. The best method of preventing the occurrence of similar accidents, is to apply the binder immediately after the birth of the child, to make pressure with the hand over the fundus uteri at short intervals, and slight traction upon the cord downward and backward in the direction of the hollow of the sacrum. By these means the upper part of the uterus usually goes on contracting till the placenta is detached, and pressed down through the os uteri into the vagina. In all cases, whatever the cause of the retention may be, if the placenta at the end of an hour is not detached from the uterus and expelled, it should be withdrawn artificially by passing the hand along the cord to its insertion, expanding the fingers, and grasping the whole mass, or as much as can be seized and brought away. The difficulty of removing portions of placenta, adhering with more than the natural firmness to the uterus, is only increased by delay.

(CASE 337.) A woman, who was delivered in the Bri-

tish Lying-in Hospital in the month of March, 1829, was seized soon after with pain in the region of the uterus, quickness of the pulse and respiration, and the skin assumed a peculiar dusky hue, and severe pains were experienced in some of the principal joints of the body. She died on the 26th day after her confinement, and on inspecting the body with Dr. H. Davies and Mr. Armstrong, we found a small portion of placenta adhering to the uterus near the fundus, and the veins of the part distended with pus. The cartilages of the right knee joint, which had become tender and swollen for some time before death, were ulcerated.

(CASE 338.) A patient of a public institution was delivered on the 30th of August, 1831, and a large portion of the placenta was left within the uterus. I saw her on the third day after delivery, when there was foetid, dark-coloured discharge from the vagina. The pulse was feeble, the countenance haggard, and there was constant vomiting and delirium. The orifice of the uterus was so firmly contracted, that two fingers could not be introduced within it, and the placenta felt. Thirty grains of ergot of rye were administered, but it only increased the vomiting and general distress. Another dose was given soon after, but without any good effect; and on the evening of the fifth day after delivery, death took place, with all the symptoms usually observed when a putrid animal poison is introduced into the system. I inspected the body, and found a large portion of the placenta and membranes within the uterus in a black putrid state, and emitting a most offensive odour. All the coats and vessels of the uterus were apparently healthy. The placenta did not appear to adhere with more than the usual firmness to the inner surface of the uterus. As there did not exist any morbid adhesion of the placenta to the uterus in this case, no portion of it would probably have been left within the uterus, had the hand been introduced into its cavity within an hour after the delivery of the child, and before the cervix had con-

tracted, at least from the history of the case I was induced to believe this to be the cause of the misfortune.

(CASE 339.) On the 18th June, 1834, with Dr. H. Davies, I examined the body of a woman who died eighteen days after delivery from a portion of the placenta being retained, and undergoing decomposition within the uterus. The orifice of the uterus contracted so much after the birth of the child, that the medical attendant found it impossible to remove the whole placenta. For five days she appeared to recover favourably; then the pulse rose to 120, and there were rigors, loaded tongue, sickness at stomach and diarrhoea, with slight occasional cough and hurried breathing. She became more and more feeble, and died without any suspicion being entertained of the existence of disease of the lungs. I removed the uterus and vagina, and on laying open the latter, a portion of the placenta in a sloughing state, like a piece of putrid flesh, was seen hanging through the os uteri, and filling the whole of the upper part of the vagina. The uterus was then laid open, and the placenta was found filling its cavity, and loosely adherent to the fundus by the decidua. There was no morbid adhesion of the placenta to the uterus, as they were separated without any force. The portion of placenta within the uterus had undergone a slight degree of decomposition compared to that which hung through the orifice. There was a great quantity of pus in the veins of the uterus, and the lining membrane of the organ and muscular coat where the placenta adhered were soft and as black as ink. The pleura on the right side was inflamed. The right inferior lobe was hepatized, and several deposits of pus in the substance of this portion of the lungs. At one point the pleura appeared to be destroyed by sloughing or gangrene.

(CASE 340.) On the 23rd October, 1835, the body of a woman was brought into the St. Marylebone Infirmary, who had died from retention of a portion of the placenta, which adhered with unusual firmness to the

inner surface of the uterus. She was delivered on the 11th of October, and a most alarming hemorrhage took place soon after the birth of the child. Several unsuccessful attempts were made by the medical practitioner to extract the placenta, and it was uncertain at the time whether the whole had been removed from the uterus. A serious affection of the brain took place, and she died about ten days after delivery. The late Dr. Sims examined the body, and found the superior longitudinal sinus of the brain filled throughout a great part of its extent by a solid coagulum of lymph, and all the veins on the right side which empty themselves into it, distended with lymph, evidently the result of inflammation. The veins on the left side were in the same condition, but to a less extent. There was no trace of inflammation about the uterus—all its vessels were healthy. On laying open its cavity, there was seen adhering to its fundus a portion of placenta as large as a middle-sized orange. On examining more carefully the connexion between the uterus and placenta, it appeared that they were united more firmly than natural at one part which did not exceed an inch in diameter. So firm was the union in this case, that the substance of the placenta would have been more easily torn than the adhesion between it and the uterus. The portion of placenta thus adhering to the uterus was harder than natural, and of a yellow colour.

(CASE 341.) On the 14th of August, 1838, Dr. Hall, of Kennington, showed me a uterus, with a portion of placenta about two inches in diameter, firmly adhering to the upper part of its body. The placenta and uterus were so closely joined together, that they seemed one substance; it was almost impossible to see the line running between them. Yet the placenta could be separated from the inner membrane of the uterus without much force being applied, or any laceration produced. In this instance the uterus might have been suspended by the placenta, without a separation between

them having been produced. The patient, from whom this specimen of adherent placenta was removed, resided near Denmark-Hill, and was attended in her labour by Mr. Cooke. The cervix uteri contracted so firmly soon after the expulsion of the head of the child, that Mr. Cooke was obliged to employ much force before he could extract the shoulders. No hemorrhage followed the birth of the child ; the os uteri closed so completely afterwards in a few minutes, that all attempts to remove the placenta were unsuccessful, and the umbilical cord was lacerated. Dr. Hall saw the patient some hours after, and as he could not succeed in getting more than one finger into the uterus, he gave up all attempts to extract it, and it remained for several days in the uterus without any unfavourable symptoms taking place. A foetid discharge then began to escape from the vagina, and symptoms of peritonitis supervened. Seven or eight days after delivery, another attempt was made to extract the placenta, and a portion of it was removed. A hook was introduced into the uterus, but it brought away nothing. The patient at last died with the usual symptoms of peritonitis.

(CASE 342.) On the 20th October, 1832, I was called to a patient in a public institution, who had been delivered about two hours before of a living child at the full period, by the natural efforts. The placenta not being expelled in the usual time after, and hemorrhage occurring, the hand was introduced into the uterus, and the cord was torn without any part of the placenta being brought away. The difficulty was believed to arise from hour-glass contraction of the uterus, and a large dose of laudanum was given. I found a portion of the placenta in the vagina, and the neck of the uterus firmly contracted around the remainder. Two fingers were gently insinuated through the os uteri, and the whole placenta was readily extracted. No hemorrhage followed. On the ninth day after delivery, the pulse was very quick and feeble. The region of the uterus was slightly

tender on pressure, and there was dyspnoea with pain in the left side of the chest. The symptoms gradually increased, and she died a few days after. The upper lobe of the right lung was covered with a thick layer of false membrane, and hepatized, and there was a considerable quantity of fluid effused into both sacs of the pleura. There was a considerable curvature in the upper part of the spine.

(CASE 343.) On the 4th May, 1839, Mr. Chatto requested me to see a patient who had been delivered the day before, after a lingering labour, of a dead child. The funis was broken with the slightest touch, and the placenta could not be removed. There had been no hemorrhage, but a great disposition to syncope. When I saw the patient, twenty-two hours after, the pulse was rapid, the discharge from the vagina was very offensive, and the neck of the uterus contracted, but not firmly. One finger was passed after another, until the whole hand entered the cavity of the uterus. The placenta was felt adhering throughout to the uterus, and was separated with difficulty from it. Even after the mass had been grasped by the hand and detached, a small portion still adhered so firmly, that it could not be removed, and was left behind. The hand was reintroduced, and as much of it taken away as was possible. No hemorrhage, but great faintness, followed. For a time she appeared to recover, but the pulse continued rapid and feeble, and towards the end of May the lower extremities swelled. She became delirious, and had the usual symptoms of inflammation of the veins of the uterus. She died about the end of May, and all the femoral and pelvic veins were found plugged up with coagula. The uterus was twice its natural size, and flabby. No portion of placenta was found within the uterus.

(CASE 344.) On the 7th July, 1831, I was requested by a medical friend to see a lady who had been delivered of her sixteenth child on the 28th June. He

had attended this lady in seven labours, which were all natural. On this occasion, hemorrhage took place soon after the expulsion of the child, and though the orifice of the uterus was not contracted, the placenta could not be brought away without considerable difficulty after the introduction of the hand, and had a lacerated appearance when extracted, and looked as if a portion had been left within the uterus. On the 7th July, the pulse one hundred and twenty. Great giddiness, and beating of the temples. The tongue was not much loaded, and the appetite continued, and there was no tenderness of the hypogastrium. There was a most offensive dark-coloured discharge from the vagina. The os uteri so open, that the finger could be introduced, and something like a portion of placenta felt within, but it was impossible to take it away with the finger, and we did not consider it safe to employ any other instrument for the purpose. Injections of tepid water, with a weak solution of chloride of soda, were frequently employed, and occasional cathartics, with quinine, wine, and nourishing diet. This plan was continued for several days, when the retained portion of placenta was expelled, and she speedily recovered.

(CASE 345.) On Saturday, 28th September, 1838, I was called to a patient, æt. twenty-three, residing near the Edgware-road, who had been delivered of her second child on the preceding Thursday evening, and the greater part of the placenta had been left within the uterus. Repeated attempts had been made by the medical attendant to extract it, but they were unsuccessful. A dark-coloured offensive discharge was flowing from the vagina. The pulse was rapid. Tongue loaded. Nausea, and great headache, and restlessness. I found a portion of the placenta protruding through the os uteri, and had little difficulty in drawing the whole of it into the vagina with the fore and middle fingers of the right hand. Tepid injections of milk and water were recommended. 30th. Discharge di-

minished in quantity, and without the peculiarly offensive odour. Pulse less frequent. Nausea, and quietude, and headache gone. Repeated doses of the ergot of rye had been given without any effect upon the uterus.

(CASE 346.) July 28th, 1838, at ten o'clock at night, I was called by a surgeon to extract a placenta, which had been retained eighteen hours after the birth of the child. The cord was torn off in attempting to remove the placenta. No hemorrhage had taken place. I found the cervix uteri so closely contracted, that one finger only could be introduced, and it appeared very improbable that the hand could ever be passed into the cavity so as to grasp the placenta. By cautiously pressing one finger after another through the orifice, the resistance was in the course of an hour so much overcome, that I could feel a considerable portion of the placenta, though the whole hand had not passed through the cervix. By pressing backward with the fingers the portion of placenta within reach, I at last succeeded in removing the whole mass. No bad symptoms followed. It was the first labour.

(CASE 347.) On the 4th January, 1828, I was called to a case near Covent-garden, in which the placenta had not been expelled in the usual period after the birth of the child. Hemorrhage taking place, the medical attendant passed up his hand into the uterus, to extract it, but found it impossible to reach the fundus uteri in consequence of the upper part of the cervix being firmly contracted. He pulled with some force upon the funis, and it soon broke off near its insertion into the placenta. He then administered a dose of laudanum, and left an assistant with the patient to make firm pressure over the fundus uteri. I saw the patient soon after this, and the neck of the uterus being relaxed, I experienced no difficulty in removing it, as it was lying detached in the lower part of the uterus.

(CASE 348.) On the 22nd September, 1828, I was

called by the assistant matron, of the British Lying-in Hospital, to a patient near Drury-lane, to extract the placenta, which had been retained four hours after the expulsion of the child. The cord and a portion of the placenta had come away in the efforts which were made to withdraw it. I found the vagina filled with clots of blood, and the neck of the uterus closely contracted. I had some difficulty in passing two fingers into the cavity of the uterus, and gradually pressing the placenta down into the vagina. No hemorrhage followed, and the recovery was favourable. The whole hand could not possibly have been passed into the uterus, nor was it necessary.

(CASE 349.) January 4th, 1828, called to a patient of the Westminster General Dispensary, residing in Whitcomb-street, with retention of the placenta, who had been delivered of a dead child three hours before at the seventh and half month. The vagina and cervix uteri were very rigid and undilatable, but the resistance they gave was gradually overcome, so that I succeeded in introducing two fingers and the thumb of the right hand through the cervix, and with these extracted the placenta, which was lying loose in the cavity of the uterus. The whole hand could not have been passed through the cervix uteri in this case. No bad symptoms followed.

(CASE 350.) On the 22nd April, 1835, a woman who was delivered at the full period in the Lying-in ward of the St. Marylebone Infirmary, had retention of the placenta, from the cervix uteri contracting very quickly and firmly after the expulsion of the child. The cord was torn away at its insertion into the placenta. Although not more than four hours elapsed from the birth of the child when I saw the patient, the orifice of the uterus was so firmly closed, that I found it impossible to pass the whole hand, and I succeeded, after a time, in extracting the mass with two fingers. She recovered in the most favourable manner.

(CASE 351.) On the 26th July, 1835, I was called to a case in Charlotte-street, Portland-place, where the cord had been torn off, and the whole placenta had been left within the uterus from four o'clock in the morning till three in the afternoon. A profuse hemorrhage had occurred. Frequent attempts had been made to remove the placenta, but they were unsuccessful. I passed the whole hand in a conical form slowly through the os uteri, and soon grasped the mass of the placenta and withdrew it. Three drachms of the ergot of rye had been given to this patient during her labour.

(CASE 352.) On the 22nd August, 1835, I was called to another case of hemorrhage and retained placenta in Heddon-street, where the cord had been torn away. As a short period had elapsed in this case from the birth of the child, no difficulty was experienced in passing the hand and extracting the whole placenta. The flooding immediately ceased, and no bad symptom followed.

(CASE 353.) Mrs. C——, residing at 3, Stacy-street, was delivered, at nine A. M., on the 4th March, 1826, of a child at the sixth and a half month. The umbilical cord being soft, was broken by the midwife in attempting to draw out the placenta. I saw the patient four hours after, when the parts had become so contracted, that I could not introduce the hand without employing more force than was proper. The placenta was, therefore, obliged to be left within the uterus. The following morning, a brisk cathartic was exhibited, and in the evening the whole placenta came away without any help whatever. No bad symptoms followed.

(CASE 354.) At ten A. M., 13th August, 1836, I was called to a woman residing in Dean-street, who had been delivered of a dead child, at the full period, thirty-four hours before. The medical attendant had given several doses of the ergot of rye, and had made repeated efforts to extract the placenta, but without suc-

cess. I found the os uteri closed, but not firmly. The discharge from the vagina was extremely foetid, which made me determine, if possible, to extract the placenta. The orifice of the uterus gradually yielded to the introduction of three fingers, with which I laid hold of the mass, and withdrew it, without passing the whole hand within the uterus. The recovery was very favourable.

(CASE 355.) On the 29th August, 1835, I was requested by Mr. Johnson, of Mortimer-street, to see a lady with retained placenta, who had expelled a dead foetus of six months twenty-four hours before. Two drachms of the ergot of rye had been given to produce uterine contractions, but they had no effect. I found the orifice of the uterus open, the margin thin, and the point of the finger readily touched a portion of hard placenta within the cavity. Two fingers were introduced, and the placenta seized, but it could not be made to descend into the vagina, and I was forced to leave it in the uterus. A cathartic draught was administered the following morning, which produced vomiting, and purging, and during its operation the whole placenta was expelled in a yellow indurated state. No bad symptoms followed.

(CASE 356.) At five a. m., 25th December, 1836, I was called to a patient at 6, Lancaster-court, New Bond-street, with hemorrhage and retained placenta. The umbilical cord was twisted firmly three times round the neck of the child, and it was torn from the placenta near its insertion at the instant the child was born. An immense discharge of blood soon followed. An unsuccessful attempt was made to remove the placenta. I saw her an hour after the birth of the child, when a very large quantity of blood had escaped, and the vagina and uterus were also filled with coagula, the binder not having been applied or continued strong pressure over the uterus. I passed my hand and withdrew the placenta, which was partially detached from

the uterus. The binder and compresses were applied, cold water dashed over the nates, thighs, and external parts, and as much gin as could be procured given to her, and the hemorrhage entirely ceased, but she died in three hours. The proper means were not employed sufficiently early.

(CASE 357.) Eleven P. M., 12th December, 1837, I was called to a patient who had been delivered five hours after a protracted labour. Soon after the birth of the child, and before the removal of the placenta, the accoucheur was called to another labour, and before he could return, a great hemorrhage had taken place, and the woman was nearly dead, being wholly unconscious, the extremities cold, and the pulse not to be felt. Some cold vinegar and water had been applied to the external parts before I saw the patient. A long broad sheet having been firmly put around the body, I passed the hand into the uterus, and removed the placenta, which was detached, and grasped by the contracted cervix. No difficulty was experienced in drawing the placenta into the vagina. The patient recovered.

(CASE 358.) On the 28th April, 1840, a woman was delivered at five A. M., and five hours after, the placenta remained within the uterus, the neck of which was contracted, but not very strongly. The whole placenta was within the cavity of the uterus. The hand was passed into the vagina, but only two fingers could at first be introduced through the orifice, with which the edge of the placenta was felt. Gradually the whole hand was introduced, and the fingers expanded, and the entire mass grasped and extracted without difficulty. This placenta would have been more easily removed four hours before.

(CASE 359.) On the 23rd December, 1838, I saw a patient in New Compton-street, with Mr. Marshall, who had been delivered three hours before of a dead child, at the seventh month. The placenta was re-

tained. Three or four efforts had been made to pass the hand into the uterus, the cervix of which was closely contracted and rigid. It was a complete case of what is usually termed hour-glass contraction of the uterus. I passed the whole hand into the vagina, and two fingers through the os uteri very slowly and with much difficulty, and without getting the whole hand into the cavity, succeeded in grasping the bulk of the placenta, and drawing it into the vagina. Recovered.

(CASE 360.) On the 6th December, 1840, Mr. Turner, King-street, Bloomsbury, called me to see a lady who had been delivered of a premature child three hours before, and who had retention of the whole placenta. The cervix was so much contracted, that it was impossible to introduce the whole hand into the cavity, and I did not attempt to do this, but passed it into the vagina, and with three fingers gently dilated the orifice, and with their points detached the placenta from the uterus, and pressed it down into the vagina. It came away completely broken up. She recovered without a bad symptom. The mother of this lady had died some years before this from hemorrhage and retained placenta. The death and premature expulsion of the foetus, and retention of the placenta, were all here produced by the morbid and indurated state of the organ.

(CASE 361.) On the 30th November, 1840, Mr. Young, Piccadilly, requested me to extract the placenta of a private patient, who had been delivered of a premature still-born child five hours before. The cervix uteri was firmly contracted. A good deal of force was required to get the fore and middle fingers through it to reach the placenta, which was firmly adherent to the uterus. With care nearly the whole was extracted in fragments, and though I believed a small portion was left behind, no mischief followed, and no placenta afterwards escaped. On the same day I met with an example of a placenta having extensive ossific deposits, not only on the uterine surface, but throughout the substance

of the organ. At one time I suspected that ossification of the placenta took place chiefly in the decidual arteries, but in this specimen it was not confined to these vessels, but had taken place apparently in the umbilical arteries and veins, throughout the whole mass.

(CASE 362.) On the 23rd January, 1841, Mr. Cross called me to see a private patient under his care, who had been delivered of her third child three hours before, and a few minutes before his arrival. The cord was twisted three times round the neck, and broken across near the placenta, which was enclosed within the uterus. The cervix had contracted firmly immediately after the birth of the child. I passed the whole hand into the vagina, and the fingers one after another with much difficulty through the os uteri, till the hand entered the cavity. The placenta I found adhering almost entirely, but not very firmly to the uterus, and I took it away with the fingers as I would have taken away a sponge or piece of moss, growing from the surface of a rock.

(CASE 363.) October 20th, 1841, Mr. Tucker called me to a patient who had been delivered of a premature dead child eight hours before. The funis was broken off close to its insertion, and the cervix uteri was so contracted, that there was no difficulty in passing two fingers after the whole hand was in the vagina. With these the placenta was gradually brought out of the uterus, and no bad symptoms followed.

(CASE 364.) I attended a lady in labour, who had nearly died in several of her former confinements from hemorrhage and retention of the placenta. Labour began at nine P. M., 29th January, 1840. At six o'clock the following morning, I found the os uteri widely dilated, and the nates presenting. The child was born alive at eight. Hemorrhage took place almost immediately after, though the uterus contracted, and the binder was applied and stimulants given. The flooding continuing, with vomiting and faintness, for a

quarter of an hour, and there being no probability of expulsion of the placenta taking place, I passed the hand into the uterus, and felt it adhering all round. I spread the fingers out towards the margin, and pressed it off from the uterus, and removed it. She continued faint and sick, and had an incessant cough the greater part of the day, but she ultimately recovered, and was able to suckle her child.

(CASE 365.) On the 14th January, 1842, I was called to a case in which a profuse hemorrhage had taken place immediately after the birth of the child. The medical attendant promptly passed his hand into the uterus to remove the placenta, but a portion adhered so firmly that he could not separate it from the uterus, and he left it adhering. The discharge continued, and proved fatal in some hours. I examined the body after death, and found one half of the mass so firmly adhering to the uterus, that I had some difficulty in peeling it off. In this case the placenta adhered more firmly to the uterus, and to a greater extent, than I had ever witnessed before.

(CASE 366.) October 10th, 1838, Mrs. F. Biggs, æt. twenty, No. 20, Great Chapel-street, was delivered of a dead child at the end of the seventh month, three hours before I saw her. The placenta soon after was expelled from the uterus into the vagina, but though the cord was pulled forward as strongly as its strength would admit by Mr. Babington, who was in attendance, the placenta could not make its escape from the orifice of the vagina. The difficulty was found to depend on the pressure of a broad smooth band or septum passing across the vagina from the anterior to the posterior wall. One half of the placenta was pressed down on the left side of this band out of the vagina, and the other half with the umbilical cord on the right side. With a pair of scissors I divided the placenta into two portions on the left side of the band, and it immediately after came away, and the septum, which had been greatly

stretched and drawn forward, went up into the vagina. On the 15th I examined the vagina carefully with Mr. Babington, and we found the vagina near the orifice divided into two canals by a broad band passing from the anterior to the posterior surface. It was perfectly smooth, and the parts of the vagina into which it was inserted were neither hard nor irregular, as they are found to be where cicatrices are formed after inflammation and sloughing of the vagina. I considered this as resulting from an original malformation, and probably an instance of imperfectly formed double vagina. She had been previously delivered twice without any difficulty, and since her last confinement there had been no inflammation of the parts. She stated that from the first she had invariably experienced great pain during intercourse.

In the autumn of 1826, at Odessa, I was called to the princess T———, who was attended in her confinement by a Russian midwife. The child was expelled after a few pains, and in removing the placenta the uterus was completely inverted. I saw the lady about half an hour after this fatal accident, but she was already dead. The bed and floor were covered with blood, and the uterus was hanging out between the thighs. I immediately replaced it, but the respiration and action of the heart were gone. I have not seen one case of inversion of the uterus since, which proves that at the present time the accident rarely occurs in London.

## EIGHTH REPORT.

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### LABOURS COMPLICATED WITH PUERPERAL CONVULSIONS.

(CASE 367.) At Edinburgh, in 1816, I saw an unmarried woman, æt. twenty-two, who was attacked with violent convulsions in the ninth month of her first pregnancy. She had numerous fits for twelve hours, and in the intervals remained wholly unconscious. About fifty ounces of blood were drawn from the arm at two bleedings, the head was shaved, and covered with cold lotions, calomel was put upon the tongue, and stimulating enemata thrown up. The fits, however, continued to return with greater frequency and violence, and she was perfectly comatose between them. The os uteri was dilatable, but there was no sign of labour. She appeared so exhausted with the fits, and the pulse was so rapid and feeble, that it was considered improper to take more blood, either generally or locally. Artificial delivery was considered by all the accoucheurs who saw her to be the only means of preserving her life, and the operation of turning was performed. But the symptoms were not alleviated after she was delivered, and she died in no long time. Dr. John Thompson and Dr. Gordon were present at the examination of the body, and except a little unusual fulness in the blood-

vessels of the brain, there was no morbid appearance to account for the convulsions. This was the first time I had seen puerperal convulsions, and having been led to believe, from Dr. Hamilton's Lectures, that copious bleeding would always control the disease, it was natural to feel dissatisfied with the result of this case, and with the absence of any morbid appearance in the brain to account for the symptoms. Fifty ounces of blood were drawn from the arm, but it was impossible to repeat the bleeding again to the same extent as he had advised.

(CASE 368.) In 1825, when passing through Biala Cerkeu, in the Ukraine, I was informed that a young woman in the last month of her first pregnancy was dying in convulsions. I went to see her, and found that nothing had been done, nor would be allowed by her relations to be done for her relief. She was perfectly comatose, with dilated pupils, and died soon after without being delivered or bled.

(CASE 369.) Mrs. Littlefield, æt. twenty-six, January 22nd, 1827. First pregnancy, seventh month. Eight weeks before she was suddenly seized with coma, from which she recovered after copious venesection and cupping; cathartics, and cold lotions, and blisters to the head. Headache, giddiness, and partial loss of speech; consciousness and memory, however, remained, and slight hemiplegia of the right side. Pulse ninety. She went to the full time, and her labour was natural, but in a few hours after, convulsions, coma, dilated pupils, and retention of urine, took place, and she died. I examined the brain, and found the upper surface of both hemispheres partially coated with a firm thick layer of lymph, and the brain below this softened. The veins entering the superior longitudinal sinus, were distended with firm coagula of fibrine, and from what I have since seen, I have no doubt that these veins were in a state of inflammation, and that the coagulation of the blood resulted from this. The

ventricles of the brain were full of serum, and the walls did not collapse after the fluid had flowed out. Death took place in this case from inflammation of the brain, but it did not appear that she had suffered any injury or was in any way predisposed to such an attack, being a thin delicate woman, with a long slender neck, and a small head. It was impossible to avoid inferring that the state of the uterus was the cause of the affection of the brain, and that no disease would have been set up in the head, had conception not taken place. Blood-letting was not neglected at the commencement of the disease of the brain, and yet it went on to a fatal termination.

(CASE 370.)  $\text{\textit{Ae}}\text{t}$ . twenty, 1827, Little Hungerford-street. First pregnancy, seventh and half month. Unmarried. Had epileptic fits for several years in early life. Headache, drowsiness, loss of memory, paralysis of right inferior extremity, took place after a slight fit of convulsion, followed by coma. V. S. to  $\tilde{z}$ xii. or  $\tilde{z}$ xiv. Cupping. Head shaved, cathartics, low diet. She went to the full period, and was delivered of a living child, and had no fits after.

(CASE 371.)  $\text{\textit{Ae}}\text{t}$ . twenty-four, third pregnancy, seventh and half month. 21st June, 1828. Subject to epilepsy in youth. After suffering several days from an uneasy sensation of weight in the head, and giddiness, was suddenly attacked with convulsions, of which she has had several fits, and has little or no consciousness in the short intervals. Os uteri closed. No symptom of labour. 22nd June. No fit, but considerable stupor continued after being bled to twenty ounces; had the head shaved, and enemata administered. Pulse eighty. A second bleeding to twelve ounces. 24th. Copious alvine evacuations. Return of consciousness. Went to the full period, and was safely delivered of a living child by Dr. Stephen Hall.

(CASE 372.)  $\text{\textit{Ae}}\text{t}$ . eighteen, first pregnancy, ninth month. 24th January, 1829. Delivered at eleven A.M.,

labour natural. The expulsion of the placenta was soon followed by a strong fit of convulsion. Venesection was immediately employed to thirty-six ounces, the head shaved, and calomel and an enema exhibited. At four P. M. frequent severe fits, without any intervals of consciousness. The venesection was repeated to sixteen ounces. At eight P. M. the fits and partial stupor continued, when forty drops of laudanum were given. 25th January. Fits continue. Twenty drops of laudanum, and sinapisms to the legs, were then ordered by her medical attendant. 26 January. Several fits in the course of the night. Has taken sixty drops of laudanum in three doses, which appeared to calm the violent agitation after the paroxysms. 27th, ten A. M. Severe and frequent fits during the night. Breathing stertorous. Pulse rapid and feeble. Died on the 28th. I examined the brain, but except a slight turgescence of the blood-vessels of the pia mater, no morbid appearance was observed.

(CASE 373.) Orange-street, Leicester-square, æt. twenty-four, unmarried. First pregnancy, ninth month. 9th May, 1828. A weak delicate woman. Had several fits of convulsion in the first stage of labour. Os uteri rigid, and imperfectly dilated. Bleeding to twenty-five ounces, and afterwards to twelve. The fits were so violent, that she was severely bruised in different parts of the body. Complete insensibility between the fits. The pains ceased, and the os uteri being only partially dilated, and the head being too high for the forceps, it was opened. The fits soon after ceased. Recovered.

(CASE 374.) Mrs. W. æt. twenty-four, first pregnancy, ninth month. 16th September, 1828. Constipation and headache for several days. Severe fits, and insensible in the intervals. Pupils dilated. Pulse eighty, feeble; face flushed, os uteri slightly dilated. After venesection to thirty-five ounces, and free evacuation of the bowels, the fits ceased, and she was delivered

the next day without assistance of a living child, but it died thirty hours after in convulsions.

(CASE 375.) Mrs. P——, æt. thirty-three. Second pregnancy, ninth month. 6th October, 1828. Had convulsions during her former labour. Headache, giddiness, and drowsiness, during the latter months of pregnancy. Venesection recommended, but not employed. In the first stage of labour during the night, several severe fits at short intervals. Muscles of left side most affected. Face flushed; pupils dilated. Pulse rapid and irregular. Os uteri widely dilated. Head pressing through the brim of the pelvis. Venesection to twenty ounces, and cupping from the temples to twelve. The child was born alive the following morning, October 7th, without assistance. The fits soon after ceased, and consciousness partially returned. Left side slightly paralysed. Pupils dilated. 11th. No return of fits, and the paralysis is gradually disappearing. From this period, she continued slowly to recover the use of the arm and leg. On the 4th January, 1829, she died in a fit of convulsion, with which she was seized soon after taking an emetic without advice. The ventricles of the brain contained serum. A portion of the upper part of the right hemisphere was softened. Both the cortical and medullary parts of the brain were changed into a substance like custard. There were tubercles in the lungs.

(CASE 376.) Mrs. ——, æt. twenty-five, January 27th, 1828. Eighth month. After a violent quarrel with her husband, who came home intoxicated, complained of headache, and general indisposition. At seven A. M., seized with strong convulsions, of which she has had several paroxysms. 11 A.M. Insensible, tongue lacerated, a bloody foam issuing from the mouth; fits continue with short intervals. Pulse slow, full, and strong. Os uteri dilated. Head of the child low in the pelvis. During the continuance of the fits, the child was expelled without assistance, at eight P. M. She was first bled to ten, and then to twenty-six ounces, the head shaved, and

afterwards cupped from the temples twice, to twelve ounces. She recovered, but was afterwards attacked with puerperal mania. Her mouth being sore from the calomel given during the convulsions, it was long before she could be made to believe that it was not the effect of poison from her husband.

(CASE 377.) *Æt.* thirty. Ninth month. 15th April, 1829. Headache, vertigo, great depression of spirits during the seventh and eighth months of pregnancy. Convulsions, and hemiplegia of left side took place seventeen days before labour. She was bled to sixteen ounces, and then cupped to sixteen, and afterwards to twelve. Head shaved, lotions, blisters, and cathartics. The labour was completed without assistance, but she died comatose three days after. Serum was found in the ventricles of the brain. A small scrophulous tumour adhering to the basilar artery. A portion of the right anterior lobe of the cerebrum softened and of a yellow colour.

(CASE 378.) In Brownlow-street, *aet.* thirty. Ninth month of fourth or fifth pregnancy. 1829. Violent convulsions and insensibility in the intervals for twenty-four hours, without any sign of labour. After repeated cupping, enemata, and calomel, the fits continued with undiminished violence. It was then agreed, after a consultation, that she should be delivered artificially, though the os uteri was firmly closed. I was obliged to employ great force before the hand could be passed into the uterus, and the turning completed. When the trunk and extremities of the child had been delivered, the neck of the uterus grasped the neck of the child like a strong rope, and much and long-continued force was required to overcome the resistance. I at last succeeded in extracting the head, and the convulsions immediately ceased, and she recovered rapidly.

(CASE 379.) Mrs. Allen, *aet.* twenty, 11, Noel-street. First pregnancy, eighth month. 1829. A very thin, delicate, hysterical woman. Headache and giddiness for several days. From twenty to thirty severe fits

of convulsion during fifteen hours. Insensible in the intervals. Pulse eighty, face flushed, bowels costive. Labour came on twenty-four hours after the first attack, and a dead child was soon expelled. No fit after delivery. Consciousness did not return for several days. Uterine and crural phlebitis followed. Venesection first to twelve, and then to twenty ounces. Head shaved. Ice to the scalp in a bladder, calomel and enemata.

(CASE 380.) About thirty. First pregnancy, near the full period. 23rd March, 1829. Labour commenced before the first fit, which was long and severe. Had complained of headache and giddiness for several weeks before. Os uteri fully dilated at ten P. M. About the half of the head in the cavity of the pelvis. The pains ceased after the convulsions occurred, till one A. M. of the following morning, when they returned, and at two o'clock a dead child was expelled. March 24. Partially conscious; no fits. Attacked on the 27th with uterine inflammation, and died in three days. Body not allowed to be examined. Venesection to thirty ounces. Twelve leeches to the temples, head shaved, cold lotions, calomel, enemata, blisters.

(CASE 381.) A young woman in Union-court, at the end of the ninth month of her first pregnancy, and soon after labour commenced, had frequent and violent fits of convulsion. Four pints of blood were drawn by her medical attendant from the temporal artery before I saw her. Os uteri then slightly open. No pain; fits continued five hours, when a dead child was expelled. No fit after delivery, but she continued comatose, and died. In this, and all the following cases, the head was shaved, and cold lotions or ice in a bladder laid over the scalp, and sometimes a blister; calomel put upon the tongue, and stimulating enemata administered.

(CASE 382.)  $\text{\textcircumflex} \text{Et}$ . twenty-five. First pregnancy, ninth month. April 8th, 1830. Had hysteria in

early life. Frequent fits in the course of twelve hours. Consciousness returned after venesection to thirty ounces. The fits were followed by severe headache, and occasional spasms of the face and extremities. Labour natural.

(CASE 383.) *Aet.* twenty. St. James's Infirmary. First pregnancy, ninth month. January 1st, 1831. Incoherence followed by convulsions, at the end of the first stage of labour. Labour-pains strong and regular, and the greater part of the head in the cavity of the pelvis. The fits were relieved by V. S. first to eighteen and then to ten ounces, and she was delivered in a few hours of a dead child without help.

(CASE 384.) *Aet.* thirty. May 9th, 1832. Had epilepsy when a child. Labour began at eight A. M., 7th May. Membranes ruptured in the night. Os uteri dilated to the size of a crown on the morning of the 8th, pains feeble, complained of headache. Pulse full, and slow; V. S. to sixteen ounces. Labour continued till the morning of the ninth, when severe convulsions supervened; V. S. to twenty-five ounces; fits and unconsciousness continued for several hours, and the pains went entirely off. The os uteri being rigid and undilated, and the head high up in the pelvis, the head was opened. No fit after delivery.

(CASE 385.) Mrs. ——, *aet.* thirty. First pregnancy, ninth month. Autumn, 1831. Six hours in labour, under the care of Dr. Girdwood. At the end of the first stage of a protracted labour, incoherence, stupor, and several fits of convulsion. The symptoms were relieved by V. S. to thirty-six ounces. The pains continued, and a living child was expelled.

(CASE 386.) St. Marylebone Infirmary; middle age. December, 1831. Had a number of severe fits soon after the commencement of labour. No relief from copious V. S. The pains having entirely ceased for many hours, and the head of the child being above the brim of the pelvis, and the os uteri only partially dilated,

the head was opened. Only one slight fit occurred after delivery, and consciousness gradually returned.

(CASE 387.) In October, 1833, a middle-aged woman had been long in labour with her first child, when convulsions took place without any complaint of headache. V. S. to thirty ounces. A feeble child born alive. Convulsions ceased immediately after delivery.

(CASE 388.) December, 1833, Mr. Gosna had a case of labour in the St. Martin's Parochial Infirmary, in which violent convulsions took place sixteen hours after the labour began. The patient was twenty years of age, unmarried, and it was her first pregnancy. Os uteri fully dilated, head squeezed into the brim. An ear could not be felt. V. S. to thirty ounces. The fits were more frequent and violent after V. S. Pulse rapid and feeble. Labour-pains had entirely ceased, and she seemed greatly exhausted, and in danger of dying. Head perforated, and great force required to draw it through the pelvis. No fit after delivery. Sensibility returned the day after.

(CASE 389.) Mr. Leech, Poland-street, in December, 1832, called me to see a case of convulsions, in a woman seven months pregnant. The attack seemed to be brought on by drinking brandy. Thirty-two ounces of blood were taken away, and twelve leeches applied to the temples, and cathartics exhibited. The fits disappeared, and labour came on fourteen days after, and a dead child was expelled.

(CASE 390.) St. Marylebone Infirmary. A young woman, on the 5th July, 1833, after being twenty-four hours in labour with her first child, was seized with delirium and convulsions. Vagina rigid, hot, and tender. Os uteri not fully dilated. Copious V. S. procured no relief; the head being beyond the reach of the forceps, was perforated and extracted. The fits immediately ceased. Consciousness was not perfectly restored for several days.

(CASE 391.) A young woman, residing in Porter-street, was delivered at three A. M., the 20th May, 1828. Several convulsion fits of no great severity took

place, but V. S. was performed to twenty-five ounces, and at one P. M. they had ceased, and consciousness was partially restored. She appeared heavy and oppressed, and complained of headache. Pulse fifty, full and strong. Ten P. M., no return of convulsions. Recovered.

(CASE 392.) In December, 1829, I inspected the body of a woman who had died after suffering from puerperal convulsions. I did not see her during life, but was informed that insensibility and convulsions had come on during labour, which was protracted. The pulse was stated to have been rapid and feeble. Delivery was completed by craniotomy, and she died comatose three days after. She was not bled. A table-spoonful of serum was found at the base of the brain, and great vascularity in the membranes around the tuber annulare observed.

(CASE 393.) A lady, æt. twenty-eight, was suddenly attacked with convulsions eight days after a natural labour. She had ten severe fits in two hours. In the intervals, she was completely insensible, with stertorous breathing, dilated pupils, pulse one hundred and ten, feeble. The fits went off after a few hours, but she remained for several days in a drowsy confused state. The attack followed the use of very indigestible food. Twelve ounces of blood were taken from the temples by cupping, and cathartics administered. Recovered.

(CASE 394.) In the St. Marylebone Infirmary, 3rd March, 1835, a young unmarried woman was attacked with convulsions at the end of the eighth month. Labour soon began. At 11 A. M. seven fits; neck and face swollen; face presentation; pains have nearly ceased. V. S. to thirty ounces. The fits continued at short intervals with the utmost violence. I attempted to deliver with the forceps, but it was impossible to retain her for an instant in the same position. Perforation. Four fits took place after delivery, and she seemed dying from exhaustion. Forty drops of liquor opii sedativus were given, after which the fits became much slighter.

The dose was repeated by Mr. Hutchinson several times, and the fits gradually went off, and she got well.

(CASE 395.) A lady, about twenty-six years of age, who had been in labour with her first child for no long period, was suddenly seized with convulsions, for which V. S. to thirty ounces was had recourse to. The fits continued with great violence, till the head was pressing upon the perineum, and it was resolved in consultation to deliver with the forceps. While placing the patient in the proper position for the operation, the child was expelled alive by the natural efforts, with the funis round its neck. The convulsions instantly ceased, but she remained for ten hours in a state of stupor.

(CASE 396.) Mrs. P——. æt. thirty-five, a widow in the eighth month of her third pregnancy. For two weeks had suffered from influenza and severe headache. At one p. m. 8th February, 1837, attacked with convulsions. In seven hours had sixteen severe fits. Forty ounces of blood were drawn by Dr. Girdwood. At nine p. m., pulse one hundred and thirty, and feeble. Hands and feet cold. Stertorous breathing. When the fits occurred, the muscles on the right side of the body became first affected ; in about a minute the spasm left this side, and the muscles of the opposite side became convulsed. Pupils dilated during the fits, and contracted and sensible in the intervals. Membranes ruptured, os uteri slightly dilated. At midnight the fits continued with the utmost violence. She was so exhausted, that bleeding could not be employed, and it seemed probable she would die if not delivered. The os uteri was not sufficiently dilated, nor the head of the child advanced, for the forceps. Dr. G. therefore perforated. Only one slight fit occurred after delivery.

(CASE 397.) Mrs. Taylor, 83, Monmouth-street, æt. twenty-five, was seized with drowsiness and distressing headache when in the ninth month of her first pregnancy. These symptoms continued two weeks, and she was attacked with convulsions on the 28th November,

1838. A severe fit of sickness and vomiting preceded the first fit, which took place at eleven A. M.; and at three P. M. she had experienced six violent fits, and her tongue was much injured. Pulse eighty-four, labour-pains commencing, os uteri high up and undilated. Mr. Marshall, of Greek-street, had bled her to fifteen ounces. Thirty more were drawn from the temples by cupping. On the 29th, the fits had disappeared. On the 2nd of December labour came on, and a dead child was soon expelled. She had a fit immediately after the birth of the child, and Mr. M. bled her again from the arm to eighteen ounces, and she recovered favourably. She was a very plethoric woman.

(CASE 398.) The late Dr. Sims informed me, that he was consulted several years before his death about a young lady in the seventh month of her first pregnancy, who was attacked with violent puerperal convulsions. Two pounds of blood were drawn from the arm, and the fits went off, but for some time after she had fits of insensibility, and complained of intolerable headache. These were relieved by the abstraction of a third pint of blood from the arm; but they returned, and the same quantity was abstracted, and eight ounces more by cupping from the temples. She did not entirely recover from these attacks till labour came on, and a dead child was expelled.

(CASE 399.) On the 4th January, 1838, I saw a case of puerperal convulsions near the Strand, with Mr. Brookes. The first fit took place two hours after the birth of the fourth child, on the 1st January. She had been bled to fourteen ounces. When I saw her, she was in a state of complete coma with cold extremities and rapid feeble pulse, and she died the following day.

(CASE 400.) A lady returned home from a concert at half-past eleven, Tuesday, 9th May, 1838. An hour after, labour-pains began, and the child was soon born. The placenta came away without hemorrhage. She

soon became totally insensible, and continued so till three A. M., when the muscles of the eyelids and lips became convulsed. At six A. M. the stupor continued, the pupils were widely dilated, and the pulse eighty-eight. Fifteen ounces of blood were drawn from the temples by cupping, calomel put upon the tongue, and an enema exhibited. She remained perfectly unconscious during the Wednesday and Thursday, and without convulsions. On Friday there were short intervals of consciousness, and on the day following the stupor had entirely disappeared ; but she had no recollection of any thing that had occurred after the time she left the concert-room. Dr. Merriman saw this case, and did not consider general blood-letting necessary.

(CASE 401.) On the 13th March, Mr. Cathrow was attending a lady in her first labour, who was attacked with convulsions at the end of the first stage, without any premonitory symptom. I saw her an hour after, with dilated pupils, and convulsive movements of the muscles of the face, and insensibility. Immediately after the first fit, Mr. Cathrow took twenty-five ounces of blood from the arm. The pains, some time before the fits, had become feeble and irregular, as if the uterine action had been suspended. Just before the first attack, she experienced a sense of weight upon the heart, as if it had been strongly compressed. The pains gradually returned, became strong and regular, and a living child was expelled in an hour and a half. She was nearly comatose during this time, and had continual twitchings of the muscles of the face and eyes. The sprinkling of cold water on the face, applying ammonia to the nostrils, and dilating the external parts, were the only remedies employed. The child lived, and she recovered perfectly. In early life this lady had suffered much from hysteria.

(CASE 402.) Mr. Wade requested me to see a lady with him on the 2nd April, 1841, in Chancery-lane. She was in the seventh month of her ninth or tenth preg-

nancy. The evening before, without complaining of headache or giddiness, had a fit which lasted several minutes, during which she lost her consciousness. The jaws became clenched, and a frothy saliva issued from the mouth. The muscles of the extremities were not convulsed. The following morning a similar fit occurred. Five hours after she did not complain of headache, but there was slight confusion and incoherence, slow and indistinct speech, and a heavy, dull, apoplectic look. Blood was drawn from the temples, cold lotions applied to the head, and calomel and cathartics exhibited, and the affection disappeared. Mr. Wade, who had extensive opportunities at the Westminster Dispensary of observing cases of puerperal convolution, told me on this occasion that he had examined the brain in several fatal cases of the disease without finding any morbid appearance to account for the symptoms.

(CASE 403.) A young married lady was delivered of a premature still-born child on the 26th April, 1842, by Mr. Edgar. The following morning she was seized with puerperal convulsions, and had several severe fits at short intervals. When the fits went off, the pupils were contracted, and widely dilated when they were about to return. Thirty-five ounces of blood were taken, and she recovered.

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In this, and in the preceding reports, are contained the histories of forty-six cases of puerperal convulsions, of which fourteen proved fatal; five were delivered with the forceps; eleven by the operation of craniotomy, and two by turning. Thirty occurred in the first pregnancy or labour, and in twenty-one the insensibility and convulsions took place before parturition had commenced. A great proportion of the children were still-born, though expelled by the natural efforts. The brain was examined

in six of the fatal cases, and in four various morbid appearances were observed in its structure : in the other two nothing unusual was visible. The fits were preceded in some cases by flushing of the countenance, headache, giddiness, drowsiness, depression of spirits, and partial loss of consciousness and memory ; in other cases no premonitory symptom was observed. Several of the most severe cases occurred in weak delicate women who had suffered in early life from hysteria or epilepsy, or had been exposed to great mental anxiety and distress during their pregnancy. In two of the fatal cases, and one which ended favourably, the disease speedily followed the use of stimulants and indigestible food. The fits immediately ceased, or became far less frequent and violent, in eighteen of the women after delivery ; in others it had no effect in arresting the progress of the disease. Copious blood-letting was had recourse to in the greater number of cases here recorded, fortunate and unfortunate ; but in some nervous women who recovered, depletion was not carried to the extent usually considered requisite in this affection.

Dr. Merriman has seen forty-eight cases of puerperal convulsions, of which eleven ended fatally ; Dr. Ramsbotham twenty-six, ten of which were fatal ; Dr. Collins thirty, five fatal ; Dr. Ingleby thirty-five, eleven fatal ; Madame Lachapelle, sixty-one. I cannot tell how many of them recovered.

The whole history of the phenomena of puerperal convulsions leads to the conclusion that the disturbed state of the brain depends upon the peculiar condition of the nervous system of the gravid uterus, in the latter months of pregnancy. The dissections which I have made of the unimpregnated uterus, and of the gravid uterus in the third, fourth, fifth, sixth, seventh, and ninth months of pregnancy, and after delivery, demonstrate that it possesses a great system of ganglia and nerves, which enlarges with the coats, blood-vessels, and absorbents of the organ during gestation, and which re-

turns after parturition to its original condition before conception takes place. It is by the influence of these nerves that the uterus performs the varied functions of menstruation, conception, and parturition, and it is solely by their means that the whole fabric of the nervous system sympathizes with the different morbid affections of the uterus. If these ganglia and nerves of the grand uterus could not be demonstrated, its physiology and pathology would be completely inexplicable, and the causes of puerperal convulsions wholly unknown.

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Page 95, line 27, *for Scarpal* read *Scarpa.*  
189, line 26, *for external* read *internal.*

THE END.

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Case 4

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